

39467A.txt.txt SEQUENCE LISTING AP20 Rec'd PCT/PTO 08 FEB 2006

						rzu nge u i	TURTU U	D L F D L
_	litalo, e				,			
<120> M THERAPY	ATERIALS	AND M	ETHODS F	FOR	COLORECTAL	CANCER SCR	EENING, DIA	GNOSIS AND
<130> 2	8113/3946	7A		•				
<150> US <151> 20	s 60/494, 004-08-08	221						
<160> 50	D						•	
<170> Pa	atentIn v	ersio	n 3.2					
<212> DI	9275 NA omo sapie	ns					,	
	isc_featu rox-1 Gen							· .
<400> 1	าล ลลลดลล:	aaao a		аа	aaaaagacct	gcgtcctgga	agagctagtg	60
							tggctcgctc	120
							tgggggtggg	180
				-			tctcttccca	240
							gccttgctat	300
_	*						gtcagataga	360
							ttgttgtgga	420
gcggagccc	t cagctga	ag gg a	gcgctct	ga	aataatacac	cattgcagcc	ggggaaagca	480
gagcggcgc	a aaagago	tct o	gccgggt	cc	gcctgctccc	tctccgcttc	gctcctcttc	540
tcttcttta	c ccttcto	ctc t	ctcctcc	tc	tgctgctctc	tcctctcctc	ccgctcttct	600
ctctcctcc	t ctcctg	tct c	tcctctt	cc	cttagctcct	cttcttttct	tctcctcttc	660
ttccctctc	c tcgcctd	tccc	ctgctcc	tc	ttctctcgtc	tccctcccc	tcccgcctct	720
ctctcccct	c tccctct	ccc a	ctcgccc	cg	ctcgctcgct	cgctgtcgca	cagactcacc	780
gtcccttgt	c caattat	cat a	ttcatca	cc	cgcaagatat	caccgtgtgt	gcactcgcgt	840
gttttcctc	t ctctgcc	:ggg	gaaaaaa	aa	gagagagaga	gagatagaga	gagagagaga -	900
gagagagag	a gagaggo	tcg g	tcccact	gc	tccctgcacc	gcgtaagtat	cttcttcttc	960
ccctcgtga	g tccctcc	cct t	ttccaga	at	cacttgcact	gtcttgttct	tgaatgagaa	1020
aggaagaaa	a gagccto	cca t	tactcag	ac	ccgtgtaaac	attattcccc	ccaggagaaa	1080
						acagtttcta		1140
						gtaagtgatc		1200
ttatttctt	t ctctttc	ctg c	tggtggc1	tg !	ggggtggcgg	tggcgatggg	ggggaggctg	1260

					•	
atgttgCtg	g acttgtcgct	gatcttgtca	39467A.txt ccttttgtgt		gggtgtgagg	1320
aggcgtttg	c tccctttcct	tctttctcct	gctctctctt	ctcaggagag	aggaccgcga	1380
gagggaccg	g gtcgctttt	tgttcgtgga	gatccccgct	ttccgccaaa	ccccatcctt	1440
ccgatctcc	c caggctaaaa	ctccggggcc	ggtccccttg	tcctttctct	ttgtcttgtt	1500
tattatagct	t gcctttcttc	ccggctcttc	caatttgctt	gtcatttgca	tacctttcac	1560
ttctccttt	t ttaaccccag	cagaggaccg	ggaactggga	ggaggagaga	gggaggtggg	1620
ggggcgctct	t gttactttcg	tctcaaaacg	ctgtcgaagc	cgaattgtgg	aaatccggct	1680
tggaggggag	g cggtgatggg	tcccgggaaa	cgcgcgcggc	gcccctcttc	cgagctcctg	1740
gacccaggg	tgggtcaagt	tgagtagggt	aaggcggcac	cgggaggctc	ggggggtcgc	1800
gtggcggtgg	g gattgggaca	ccagcacgag	gaggaccgga	ggatcgcggg	ccgggtaaga	1860
gtagggggtt	cttgggcagc	agaaatggga	ggcgatgaat	ctcccagcca	tcgctggcag	1920
actatggtgt	tgggcagctt	cggtctggtc	tcgtctgggt	ggtacctacc	gttttgcccc	1980
agttaggagg	actggggagg	gaggacagga	gaggtgagag	taattgttac	tgggaagact	2040
agtgaggagg	gcgggaagag	ggagggaaga	gctgctatct	tgcctgagca	gatcaggagg	2100
gggacgcagt	gggcgggggg	agacatcacc	caaagtccag	tttagcaagt	tgttgattct	2160
tctggtgtgc	cagcccgtta	ctcccctgc	tgaagctgaa	ggttggtgga	gtgatggagc	2220
gtggggatgg	taaaggagga	gtaagtagct	ttccacagac	tcccaggtct	ctggcccctt	2280
cccagcttct	tgggaaattg	agagccctcc	aggcagacag	agaacagaac	tagaaggagg	2340
ggtggtgctt	agtcttaaat	agctcaagga	ggcaggttgg	agtgtgaaac	tgctgttctt	2400
ggcaacccag	aaggctactc	tgcctggggg	aaggctggaa	actcacctgc	ttgtttttat	2460
ttttccgaga	agatctgtgc	tgtctccttg	agcttataaa	aacagaggaa	gcacagggtg	2520
gcctcctcgc	aaagtcaagg	ctagaagact	cccttctcct	gttctctttt	ccactcatgc	2580
cctcccttat	ttaaaaaaaa	aaaaaaaag	aaagaaaaga	aaaaaaaag	aactcatttc	2640
ctttcctaac	ctaggtaggc	agaaatctat	tagcagagtg	cgcatgggca	gggcctgaca	2700
ggtgtgttgt	gtcaagaaag	acaggtgcaa	atttcctctg	tgtctgtgtg	tgtctgtaca	2760
gctctagacc	acaatgcttg	ctcgagggtt	ggagaggttt	atgaatttat	ggttgtcctg	2820
gttaatagga	ttgtctgggc	taatgggaat	tgggctgttg	ttcttttgag	ccctgccatg	2880
tgagttcttg	gggtgggggg	tgggggcaag	ttggtatgtg	tttgtttatt	tttcttaagg	2940
atattggcag	tctactgctg	aggctgtgtc	ccaggcttct	gtctgccagt	cagcccaaag	3000
cacccccact	ttaggcagca	ggtggaggga	gactgacttt	tcctttgctt	cctaccagtt	3060
tatgcctatc	tcccaggtct	gtgcttggca	gagagagaga	gagagagaga	gaactgtcgt	3120
gtgtgtgtgt	gtgtgtgtgt	gtgtgtgtgt	gtgtgtgtgt	ttgtgtgtgt	gtggtgtatg	3180
ctttggatag	caatgagtgg	tgtgtaactg	ccaagaattc	caaagtcagt	ttgaaagtgt	3240
tactgttgtt	aaagcttatc	tttttaagca	tgctttctcc	ttgcccagaa	agaataggta	3300

39467A.txt.txt 3360 tgtacataaa ctctttcaag tcatatgtta aataatctca taaagtagaa tgagcctgtc attgtcccag acatgtgcca aatgtcctag atatgaattt gatggagaaa gaaaatctca 3420 3480 agtacatgag aaggtaactg tgcttttcta ttctgatgca agatgtgaga agtcagttct acagggaatt tottgcaaga acttotgagt atttocaaaa tgaaattttt tgtgtgtgtt 3540 gagggaggaa aacgagagta ttcacattaa cttgtccatg ggttaaaaca tggacatgta 3600 tatgtaatag taaaataggt gaagctaagg actgtggctt gatgtgtgag gaaagttgtt 3660 gggaattcaa tgtaagcact atatctggct tcttaaaact tgacctttta aaattatctt 3720 3780 taaacagact acttctgtag actgagttgc acaggaatag gttggttggc aaatggtttt tgctcattgg ctttgtgttt gggtagttat tgtttccatg aaaatgagat cgtatgtgtc 3840 atttattctg tagacttcaa cattaacgtc ccccacctc ccaaacacac acacacacac 3900 3960 ccaatacttt ccttggatgc ttttgaagtt ctttggtaat taaaatgtca tctatgccta 4020 tottcatttg ctttattttt aataggggtt atctgtgctt ggcacttatt gatattttat 4080 gtgtccatta tgcagaattc tatttagttt aatcaccacc ttgtgggaaa aaaaagtcat 4140 gcatacataa catgcatctt tgttctcact ttattcattt cctagcatca ttcctctata agcagcacat gctatcttaa aacctaagct ggcttattct gtaagttgcc agacttcctc 4200 tttatttgtt taaaactcaa acaggcctct tttcatgaat gtcttatatc attttaggga 4260 ttgtcttgaa tttgcagtgt taatataaga agttttaggt ttcagattaa caaaagaaat 4320 4380 tataaaatgt gactgatgtt ataatatgaa aatagattgt gcatgatgta tcattatagg 4440 attttaatta agtacctgtg taacttggaa aggaaccata tacataagga atttctcaga cttattgcct gtgcattctc aaaggacatt tagagagttc aattttctgc aaaaagaaaa 4500 aagtgtattt tettaagatt attteaeact etgtettatt taeetatetg ataagttgtt 4560 actttttaaa caagtagaaa ttaatatttt aggcatgtct cagaaaatgt tctgtgttca 4620 4680 taaatgattt gagaagtata ttatgacagg aaatttaaaa acctgataac gcaatcttag 4740 ttaatttagg tattaactta tgtcaagtga gttcttcaaa ataaatatca aaggttttct 4800 taacctgata gggagcagaa atatctccaa tatctctgaa gaaaaagttg ctaattagca 4860 gaaacaaatt cttgaatgta gtgaagggga caatttaatg attcaggggc tacttaaatc 4920 4980 agaccatctg atttttcccc tttgaatcac taatttccag attgatttga aatattcttt gttaatgata tcctatttga aatttcataa ccaggttgac ccaagtagat tagaggccca 5040 tacaaagatg attttctaaa agaagtcaag tgtaggcttg cacaatttct tcaaataatt 5100 ttatcaacaa agacagatca tctaaataat ccaagcagga aaccatgcca accttacact 5160 ctccctgcct cataaaagat ttgtctgaac tatctggata attaccgtaa tgaaacactt 5220 ctttgtccag aatctggact ccagatagat gcagtaaaag ttgaatcctc ctccccgaaa 5280 taacttcttt attaaagtag agcacttaac cactttatac ttcacgctgc agtgttcctt 5340

			39467A.tx1	t tyt	•	
tgaaattcti	t tactgaaaa1	tctttcctc			ccttagaatt	5400
ttgcatgtta	a aagagaat g t	cagataatto	agatattaaa	ggagactctt	ttggagtagt	5460
taaaacctgt	tttgattata	cctggatgtt	: tattcttcta	atatctttt	ctgggaggaa	5520
tctgctatgt	: taagatatgo	attgtataag	, aattactaaa	gcatttgtgt	aggttatata	5580
cgaagtgatg	g caacaaaata	ı tttaatgatg	aaaaactcta	tatagacttt	cacattaatt	5640
aaagaggggt	ttacaggaat	agagtaagtg	, tatccgatca	ataatacatt	tgggttcaaa	5700
ttctcatcag	tatttttctg	catccttgct	gatttggaca	tccaccagtg	ttgatcaaaa	5760
gcttcatatt	gcctagtgaa	actgaaaatt	aatgttaaaa	tgcaaatatg	atatgcatca	5820
ataataattg	caggtgaaac	atgatagctt	aatacatatc	ttgagaaata	aaggagttta	5880
aaaaatatca	atgataaagt	cattccatgg	cttcctttaa	attctgaact	ggaatatcat	5940
ggaagcactt	gggaaatgtt	tttaagagat	ttaatttata	ttatggtaac	gtaacagtac	6000
attttcttat	gtggtaaata	tattcatata	gatatcttgt	ttatgaaatg	tgatgctaat	6060
aaagtgctgt	gtcaaccggt	tattattatt	taatcatgcc	tatagcttcc	atgggttatg	6120
gttccagtgt	gtgctaccac	tatactttta	tttctaaatt	aaatctaagc	tatatggaga	6180
gatatattta	tttgtgccta	ttaatataat	gccttgtcct	ggattatata	atttatctta	6240
tttttcccat	ttgttttgtc	ttatttgtta	tgttccagct	ggacatttta	caacaagacc	6300
taaaagtatt	taaattcttt	tagcccaaga	cagatacaaa	tcgttattta	atctaaaaat	6360
gttgactgaa	atagaattac	aaaattagtt	tagtttggtg	aatatcaagg	gagttatatc	6420
ttgttcttaa	cagactccac	aagcatttct	ttccacctta	ggaagagcac	agccctcctc	6480
ttggctccag	catggggcag	ggatgcagct	gttgatacct	aggctagatg	agaggaagtg	6540
cagttgacgc	agaggtaaat	ggcagttgga	aaaggaagga	tgcctgggga	tgaccttgtg	6600
ctcatcagcg	acaccagtct	gtcctttcca	agcctctgtg	gcagagctgc	tcttcccaca	6660
gcaaggatgg	caggaggaaa	gtccagtttg	ggtgttaggg	tgaacaggga	gagaaaaaat	6720
actgcaaaaa	gtttgtttga	cattttgatt	ggagatccat	gtgctttgca	ggtgatagtc	6780
aagagaaaag	gatttgcata	caaatagaaa	agatgtaaaa	tttaaaaata	agggcaataa	6840
gctctatttt	ggggaaggtg	atatacacac	agaaaaaagt	cttccttgta	accgcccccc	6900
atgcaagtgt	ttctttgatt	aacagagctt	tgaaatgatt	catccttttt	cttgtctcag	6960
cctctccttg	ttctttctgt	catctgacag	ctaacctgat	ttatcagatc	taatgtgttt	7020
gtgtagtatt	tgtcactgca	tttttgtatt	cctgaaacca	attttattat	tagtgtttga	7080
aagggtctca	atcattctga	attcaatttt	gaacccaatg	ttgtagttct	tgagaactcc	7140
atctccattc	taagttcagg	aaattttatc	ctgaagcatg	caaaaagtat	ttcattctca	7200
agcatgcaaa	tatatatata	tatatatata	tatatatata	tatatatata	tatatatata	7260
taaagaggta	tcattttgct	ttcatgatac	cctaaagcag	gctcttttaa	aatgttttat	7320
ctttctatag	aaaccaggag	caaagatttc	atgaggaaat	cactgtcact	taaaaaaata	7380

39467A.txt.txt tacatattgt tgccatctaa gcattgagca ttttcttgat ttttacaggt tatttcatgc 7440 7500 tgaaattatg cctatttgca tggatagtca ttctttaaag ctagccacag atgcagtcct agggagcacg tagatgtttt tacaggtgaa ccgaaagaga tgggagccgt tccagacact 7560 ctgcatgctg cctttggcaa tggaccctgt tattgtgaag atgtgctctg ttaagcaaac 7620 qtqaagttta atattagata aacccaacgt gaaaaaaatt ttcattttct tcataaaatg 7680 7740 ttaattataa acaaaaagat gtgacatctt atatgtctac aaaatttggg attagcatca 7800 ctagttaata agttacacaa tgtcaagtgc cttttatgaa attcaaagaa ggatgttctc tttttatact gtgtttccaa gaaacaatgg aagttcatat acaaagaaat atttcccttt 7860 ctcacacatt tgatggacat tattttcttt cttctttata tatcttcttt cagttttttc 7920 tgttttttt tttcctttaa tttggcacag gaaataaggt tcacaaatcc tgtatgttaa 7980 agagtttctt tgggcattgg acatattatt ttggcagatt taaacagaag gaaactagtc 8040 8100 ctgaagatat atttatcttt atctcggtca ataacttatt attcctcata ttgatttcta 8160 aaatgtggta acatccttgt tttgcagtga atccaacttt gtaataattt gtcattaaaa ggacattatg aaaatgtata aatattctta tagttacatt aagatatatc aacagatatc 8220 atcttcacct atgattttac aagtaaaaaa tgcatagcta agctaaataa gcagacttat 8280 aaaatgacta ttgtgcattt atttcaatgc taaactgacc atttatgttt gaaagatgct 8340 gctgctaagg gtgttctcct tcccatttta catatgacaa aaatattgta aaattcaaga 8400 ataaaagctc tctattatat atttgcattt attttagagt ccttttcctt taatagcgtt 8460 aaaaccacac taattgtaat gcagaaatgc aatttttcat gtgaatttct catagtctca 8520 aaatttaacc ttatttctta agtatagagc agtttcatct tccttataat atgaatctca 8580 atgcccaaaa tttaatcaat tggttgtcag aggctgtgtt cttataatct actgtttctt 8640 ctgaagataa acagtatcat tttaggcatt tgtgagagag aatcatatta ctggtgctta 8700 agcagttttt gcttaatttt tttttaatct taatccatct taaaccagtg gagcagaaat 8760 8820 atttaaaaat gtttcatttc aagcagagtg cataataaat tgcaataatt gtaatgtgcc 8880 ataaatccca gagcctatgc attttgcatt tgattcagga ttgaggtcag gaaatttgga gaaatttaaa gaaaatgatt catcagtcct tttgttctgt tggccagggt cccgggattc 8940 ttgagctgtg cccagctgac gagcttttga agatggcaca ataaccgtcc agtgatgcct 9000 gaccatgaca gcacagccct cttaagccgg caaaccaaga ggagaagagt tgacattgga 9060 gtgaaaagga cggtagggac agcatctgca ttttttgcta aggcaagagc aacgttttt 9120 agtgccatga atccccaagg ttctgagcag gatgttgagt attcagtggt gcagcatgca 9180 gatggggaaa agtcaaatgt actccgcaag ctgctgaaga gggcgaactc gtatgaagat 9240 gccatgatgc cttttccagg agcaaccata atttcccagc tgttgaaaaa taacatgaac 9300 aaaaatggtg gcacggagcc cagtttccaa gccagcggtc tctctagtac aggctccgaa 9360 gtacatcagg aggatatatg cagcaactct tcaagagaca gccccccaga gtgtctttcc 9420

ccttttaaca	ggcctactat	nanccanttt	39467A.txt gatatggatc		taaacaccta	9480
					ccccagtgtg	9540
-			atggccccgc			9600
			cttccccagc			9660
_			cgagaggagc			9720
	•		ctgcaggaaa			9780
			aacctgtctg			9840
			ggaaggtcag			9900
			gccctgatca			9960
	•					10020
			gaaagagacc			10080
	· · · · · · · · · · · · · · · · · · ·		aaacaggaac			10140
			gccaagccct			10200
			tttgcagtca			10260
			ggcgacgtca			10320
			actgaccaga			10380
			tccggccctg			10440
			acgggcttca			10500
	•	.*	tttcagagcc			10560
	•		gaatccttag			
			ctgagccacc			10620
			tcgctcataa			10680
			ggaagtgcaa			10740
			aaaaggttgg			10800
			acctttccca			10860
			cagaaaagct			10920
			aggagctcct			10980
			attatcttct			11040
aataaagaag	tagatttaga	gatgagaaaa	cagtctcatt	gtaaatactg	attgaattct	11100
ctcagatatt	ttttaaagat	ggtaagttta	atagaataag	gagaaaagtc	agttttcaga	11160
tccctaagat	cccataagaa	gaattctcag	tgtaaaccat	ctgcaaggct	tctggtccgt	11220
ttaaagacag	cccgatgaaa	tcttaggaag	agcgctttac	aagtgggagg	ttgaggagga	11280
agaaaaatgg	atgtgggtgg	ggagttagtc	tctctttcat	ctttaagtga	gactttttt	11340
tttaaggaaa	tatacaggta	ctgatttatt	cagaca gcat	cggtctctct	cccgttcacc	11400
caaggtctgt	tctttgggtc	tggtgcagct	gcctctatgc	atgattaacc	tctgttcagc	11460

			39 467 a.txt	.txt		
catacacaga	a aatcttttgt	cccaacatac	acaaagcaaa	ttattttgga	aagcgagaga	11520
gcacaattaa	a atataaaact	cagctgtatt	cgacttaaaa	atggctcttt	ttatgattct	11580
tttaaattct	gaaactgacg	tttatgtaga	gataacagtt	atatttttt	attaggccta	11640
tcccgaacto	: cagctatttt	taactgaaga	ttttttttc	tctctgtata	tcggttcttt	11700
ctgtaaattt	tttaaaaatc	ttgtggtcgt	tggtcttttg	ggagtagtaa	aatagtagca	11760
tttgggggca	ggtggaggca	tgtttcttat	ataataaaca	gatggatata	aaatttagca	11820
attaagttgg	ctgtgactaa	atttaggatt	ttgagcaatt	gtcttgatga	ctagagattg	11880
acattttcat	atctaagccc	actccagagg	ctgccacgta	agtgcaaagt	cccagctatt	11940
ggtggaaata	tgttttcctg	gttagtggag	gtcgtacttc	aagccacctc	tcaggataat	12000
agtgtagatt	tctgataggg	tgaactacta	gggccctaat	catgagtcct	gcttgggcag	12060
ttaaacatgg	agtctctctt	atactgagca	agagaagaac	attgtaacag	aaagggaaga	12120
gaaagatgtg	ggagatttct	acatatacgt	agaaatggag	ttttagcttg	gttgttgatt	12180
tcacttggac	cttttgaaga	tctaaaattc	aatccaccag	ccatgaatca	aagctgcacc	12240
aagcaccatg	ccttacatat	tataagcagg	cagtaaatat	tgatcaaatg	attggaatat	12300
cgctgttggt	gatgagaaag	gcaaagtaag	aagacacaat	ggcttgaatg	gtttttgtgc	12360
cctttgcaaa	aagagcatct	tcagaggttc	atgtaaggct	aatgtctagg	gctaagaccc	12420
cattgcaccc	cagagatctc	ttaacttcat	tttgaaccag	gtagttgtga	tagtgggttc	12480
tttctgtctc	tctctctctc	ttacacacac	acacacac	acacagacac	acacacacag	12540
agtaaagtga	catgcgtgcc	aattttggtg	aatatttaaa	gatttaatgc	caggtttcaa	12600
aactcctgta	agtccacact	aagctcttta	gttcaagatg	ccagtttatg	gtttttcttt	12660
aaattagact	tttcattata	accagatcat	tataattatg	gctgtgcttt	ttgtttttag	12720
	aaaaaatctt					12780
ctctccaaat	ccccggagga	attttgagga	tttgaattga	aataagttcc	ttttattttg ⁻	12840
atacatatca	aaggctttaa	agaaaatata	gttgcttctt	cttcagaggc	atgacttctc	12900
	tcaacataac					12960
catgtgaaat	gttagttgct	cacactcaga	attgtttctt	tcatatagct	aaataatgtc	13020
	ggcaattagt					13080
	tctactatta					13140
	agagtaagat					13200
	ctgttggttt					13260
	gtgttcttcc					13320
	agaaatatct					13380
	tatatgatcc					13440
	atgaaatggt					13500
J J		_				

39467A.txt.txt atggctttcc aaactgttat atataattta atttttcagg aaaaattatc tcccactcca 13560 aaaqqtacca tctgtttttt gaacaaaqta qctaaqataa qaactattaa qaacaccaqc 13620 ttatcaggtc aacccattct acattcacca cattaaacat atatgttctg taggatagaa 13680 cacactacct cattatccca tctagtagaa gggaaatagt gaatgtgtat gcaagttaaa 13740 ctgaatttca gtgcacctgc tccaagggct catgtcttgg attttaaaaa tatgttcagt 13800 atctttgcaa atgaatctgt ttaatcaaat attaagtttt attcaaattc caaaagaaac 13860 agtcagccaa ttgcttttct tcatgatgtt ccttgtcatt catcctcttt gcatctcaag 13920 13980 aaaaatagcc tagtttaggc cccaaacatt tgcatgcacc cagttaaagc acaagaggag 14040 tagtataagc cgttaagacg tgcaggtgaa gaaattgagc ctgttctctg aaacagccgg 14100 ctttttctac tcaactttta gggagaatgt tagaaagact tgaagtttag aaaggaaaat qqtttagtaa tttgaaatta aaatccaacc aggaaccata gattagaaat gaatttctga 14160 14220 aatttgaaac catccacaga aattgatctt atacattttt agaagtcttg tggaggctat agtacttata ttagctagag caaaacatgt agattaaaga ctaaaagact ttgggctcct 14280 14340 acactacccc cctcccctga aaaaaattat aaagtaagta aattaaaaaa aaaaaatccc 14400 tacactacac agccctccga ttatggtgaa cttcctagtg ggagttacga cttgctctat 14460 cactgtcatt atgtgagaga gtttagatct tttctccca ttttagtttc tagggggaaa 14520 acctcttaga aacttagcaa attagggaat aaggcagaac taaaattctt taggtttcaa 14580 atgttttgga aaatgtaagt agtctcaacc catttgctgg gaactgcagc acgtacaatc tctagctaca atccagagtt tagctggaaa aaaagaattt tcttcctccg ctttcacagc 14640 ttattattct cccatttqcc tttttgctgc ctccgctgct cctcccgtgg ctgctgttta 14700 ggtaaggtta tattgtactt ggtaaacaga caacacttag gttctcaggt tgtttgaaca 14760 14820 ctgctttacg ttcagctgca gtaccctgct tctctgatct tttatattcc cgagcagatg 14880 tctttcatta atttatggat ttatcatctt ttcttttttt tttcttttt cttttttt ttttttaca cctggcagct gtctcaagtt tcaacagtta ttgtctattt tgcattacac 14940 15000 atagaattga atgtcatctg tcttcacaaa gctatggcta agagaattga ggcacagcca catgagetge tgggacagat ettgtttgcg ttccatecec ceteacecea etcecettta 15060 15120 cctccttaat atttattgt gctcattttc tttcctggcc ttgaatggag cttagctcgt gttcagtaca gctgtatgtt tactgaatct attccatcat gagtcattgt gcgtgtgtaa 15180 gtatcctgga aacagctagt gctttcttgg aagaacagtt gcttttcagc acaagcactt 15240 aaaagggaaa ttaaccaatt ggtcagttca gatttatttt gaggagaaaa aaaggattat 15300 ctaactgttg ccttttaaat gtttcattag ttattttaa tagtttatta gaaacatata 15360 ttttatggga attttatctt aattacacaa taagcaagag ataaagatta attctgtgtt 15420 ccatttcaac tgatcagttc caagtattac caacaggaaa cattttaaag caaaaatgaa 15480 15540 cttgagaaat ccaaatcaga ataatttttt gttagataaa aagcctctaa atactgatca

39467A.txt.txt aaataaaatg gatattttac tttttttaga taaaaagaac aaaaacatct tagcataaat 15600 tagatgtatt aaaagcttca ggaagttttg gtagctcagt gcccatctaa gaaacacaga 15660 aaaacacttt gtattttgta tgacaccaaa ttttaaaaga tttgtgactt ccaattaaat 15720 qcatgacgtt gtcttaatgt agccatctga aagaaaagat tagaacccag atctgagagt 15780 gtctgtcaaa gtttggactt gcctaaaact cttatcacaa ggcagtcgca gacagcttgc 15840 aactattatt tcacttatcc atttggacag atggtcctga agtgtgctgg gctcctttag 15900 tcttctgtat cagtctaatg gaggttactg gagggccttt cagccctctc cttggcacaa 15960 16020 qaaqtatgtc agtcataaat tatcgtcttt gtaatcatta aggatctcaa acaaaaacac aagttcagtt aagctgcttt ggcttacaga tataaaatca aaatttcttt ctttagtgtt 16080 tattttcagt ttaacaaaaa ataaaaaaaat aaaaaacctg cactacttaa cttttctatt 16140 tacagaccaa ggtgatcttt ttaaaattgc atgggatatt aaagggaatg ttaattgaac 16200 aaattctcag cagaatattt ggttaaacac cctgttataa gtagtcaaga gcttatccat 16260 16320 attaatttga ttatgcttct ctagtaactt tctggtttcc ctccattctt aagattagtc 16380 acgctagact tgatgaaggt catttggaaa attttacctt tcctaaatat ctgtgtttat ttgacatttc tgcctaaggg gtgaaatttt tgttgggtag ttgtgtgagt gtgtttgtgt 16440 gtgtgtttgc acacacaagc acactttctt ttcttttttt tcttattttt cttagacact 16500 cttctaaaag aaaatcctta gagaagcttc taggaagggc ccttaattga ccttgtgggg 16560 gaccacattg attttctcca cgtgcatctt catttctgat aaattataaa gccattaatt 16620 tgctgaggaa atggcagggc caggctgcgg cacagatgtg accagagcca tcccagctct 16680 qagtctgctg aggagtgcca agaatctggg ggagaatcag gaagcctgga ttgttatggt 16740 16800 tagcctcaca ttctcttggg aactgtttta gttgctgctg tttacagatc taaaaggtaa tgatgtttcc agataaatag gccttcttat tttgggtaag tggccattta ttgatctgct 16860 aacccacatg tattgatttg ttagccccaa ctactgcgtc actctcaaag gagttaacta 16920 taaatccaag acaggcaaat tgtatttggt tttggaccat tgctttcaca aaagcaacag 16980 cccctccct gtcctctcca tgccaaaact actcttccca agttttagct attatttaaa 17040 17100 aggaaaaaca attaaaagga tataataaga taaaaagcaa gtgagtcaag atgctccatt agattaacac taaaaggtaa aatgtgaaac ttgcatagca gtgttcaaaa taatgcattt 17160 tatattttca tgtacattag tagaataatt tgctttaaac tgcagagtgt ggagagaaga 17220 acaaacagaa ctgtaattgc aaggaagaaa aaaaaacctc ttatgacaag agttgtgtag 17280 tacatgttgg gtgcatttgt ctccttagca acaagtgaat gtatagatag cctaccgacc 17340 taaagcaagg aaaatatttt gccatcctca ccctaaagta gccaagattc tgcaactcaa 17400 ttgtgcatcc tcaccattgc atgtggcaac ctctgacagg cgacggtcac tgagcaaatg 17460 gcagcaagtt agcaatggat gccatagcca gtgtcatata ccttccagca ctcccaccgc 17520 agcttgatgg acccccagac tctatggagg tggggactgg agggagggag gtgggagtcc 17580

ttgtgcttac	agaattgctt	ttccttaacc	39467A txt aattgcatcc		aaggattgtc	17640
acccaatcac	ttgaaaaaag	caaagctcat	gttttttat	acccgttatc	ccagctccaa	17700
tatgctgaag	acctacttct	ccgacgtaaa	ggtagggact	ttttttattc	ttaattttt	17760
cattttctat	gcatgtggca	gtaatttgaa	ctcccggaag	ttaatggaga	tgaatgtgga	17820
attggtttat	tcctacacct	gtgttataat	tgatttaatg	cacttgtctt	tttgtctaaa	17880
ggtgtgttaa	gcaaagatgc	cacttgtgta	ttaagattgg	aagactggtg	ttaataagtt	17940
gcatgggttt	ccaatgtagt	ctgaaaaact	tagcctctgt	ctttatatgt	ttgagtagct	18000
tctttgaaga	aatttcagct	ggtaatggat	gggtgtgctt	tagagaatgt	tttttccctc	18060
ccctcagcaa	cagtaaactg	tttctgtttt	tgtttctgtt	ggtttcccca	tatttgtgct	18120
tatgaaagca	aactctagca	cctctttttc	cccctgtcga	aaaggagcgt	acattgaaat	18180
tctctatgca	gtagctgctt	aaaaacaaaa	gtgatgattg	tctcttattt	acaacttaat	18240
ttgttgttga	tgtagagtac	actgagcata	aggagaatga	ataaagtgac	agattcagga	18300
cacattattc	aaatgaggat	atgaaagctg	tcggcctaca	gctgcagcct	ccctcattct	18360
acagaatatt	gggacctcct	ggttctctct	gtgtgtgtat	gcgtgtgtgt	gtgtgtgtgt	18420
gtatgtgtct	gtgtctgtgt	gtgggtttta	agtaattgtt	tgcatcaact	tgatgttgtg	18480
ttaatcatct	gtaacttttt	aaaacataga	ttgggttttg	atgatgataa	tgacacacat	18540
ggtatcatta	tcccaggaac	ttgataaaca	ctacattagc	tgagattagt	ttattagggg	18600
tgggtgtttt	ttccccactc	ctccctgcc	cacccccata	tgtacaagtt	cttctttctg	18660
ccatggagaa	ctcacaagct	gccaaaacac	actcgctctt	ccactgctcc	ccgcacgcag	18720
cttgttttgt	gcttgatgcc	caagtggctt	cattggcccc	attttgcagg	ccaactcatt	18780
tcagtttcct	tcactggtgt	tttatttggc	cttataagaa	aagttctgtt	ttccctcctg	18840
tttgcttttg	aattgtgtat	caacttcagc	cttttatctt	tctccttccc	tggctgtgct	18900
ccttaagtgg	aaggcttgtt	ttctccttgt	tcagcaccag	caaactgggc	aagatgggga	18960
ggcagggaaa	gtccatcacg	taaatgtctg	gataagacta	agtgagcaca	aacaaggctg	19020
agtgacacag	aggccaggaa	aagggtttgg	gctttgtaga	ggacaatcta	gaatacacaa	19080
attgaaggca	atttgtcacc	tggttgagga	ctgaccagct	tctagagtct	agtagaacct	19140
ggtaaagttt	gtcttccagg	gaatcctccc	aacattttag	ttctaggagg	ggacatggag	19200
gacagggaga	aaagggttat	tgtgtgcaca	tatgtgtgtg	tgtgtgtctg	tgtgtgcaga	19260
tgtccatgtt	actcattcct	tttagggcaa	tgatcttcag	tgttgtgaaa	taataatgac	19320
aataacttat	attctttgca	tagcaatttt	cacccagaag	taggccaaag	agctttacca	19380
actgcacaca	taggtgtcac	tcacccacca	cggaaacaca	gccacctgga	gggtgggaaa	19440
cagcagccat	tctgagccaa	cactacccaa	cagtagacgt	caatattaga	aacaatcatt	19500
ttttgtgaga	gttcaagcat	gcgtgcatgt	gtgtggtgtg	tggtggcaag	tggggaagat	19560
tattgatctg	tagctttata	aataccatgc	aatacaaacc	aacaagaaac	tgttcccatt	19620

39467A.txt.txt cctctagaat gcccctagca attcagcttt gcaaataacc actgactctg tgtagataac 19680 aatggaatac ctgggtgaat attttatttt caaaagcact aatattcaga ttgttgattc 19740 19800 tatccatacc ttacccatac tggaagagaa ggctgttaaa gtatatgtga gtctggttac 19860 taccaattat ccactgtaat ggaggggaaa cagtagaaca tatcaggcaa agcagaaaat 19920 cactgaaggt cacttctctt ttatttttgg aaggaattat acatttttaa ctttcctaat tatgtttttt ctttggttag taataaatga atttgtattt cttgagctta cactgatgag 19980 agtagaaagc catgcaaaga aagggaaagg tagtccaggc aatgtggtcc agagactttc 20040 cagaaaacaa tggcagagca ttctgggatt tcttcaatat taaggataat cacagatgtg 20100 aatattgaca atgtatacac acacatatgt gcatgtgcat gggttcacaa tacacatata 20160 catatataca catatctata gcttgacatt gacatacaga tagacaagtg tgtctattta 20220 20280 tttgcaaggc tgaaagaaat agatatttct ttatatatga atatacaatc caaactttta ttttggccag gattcaagaa atcactagag aaattgggga agagaactta gggtcttctc 20340 20400 agaaatgaaa cctgcatcat ttatctggaa caagatatat gcatgtatct atggaccatg 20460 taatgcttgt tataatgaca tgaggctcta cttggtcatg gccacattca tctaggagaa aattcctaac tttagtaaaa tgtactcttt caaataataa agttatttta ttcaattttt 20520 tttttttgag acggaatttc actcttgtca cccaggctgg agtgcaatgg tgcaatctca 20580 gctcactgca acctccacct cctgggttca agagattctc ctgcctcagc ctcccaagaa 20640 20700 gctgggatta caggaatgtg ccaccacgcc tggctaattt ttgtatttt tttagtagag acggggtttc accatgttgg cgaagcttgt cttgaactcc tgacctcaaa tgatctgcct 20760 20820 gccttggcgt cccaaagtgc tgggattaca ggcatgagcc accgcgctca gccctcatat 20880 tttatttagt gatcataagt tcattttgca agcaaaaaca aaaaacaaac aacaacaaca acaacaaaaa aaaccaggag aaaaaaatgt gagcagaaaa tatcttgttt cctgaatatg 20940 gtataacgta atggtccatc aaagccacac ttggaggata gagctagatg gggtaaatcc 21000 tctgacttgc tctagaaggt gagtcatgcc aaagtggtgc ccactccttt gtatttctcc 21060 ttaggaatgg acacagtgct taactctcca caaatgactt ccacctgggt aagaggtaaa 21120 tgcttttcaa ttaccttgga acgaaagagg tagagggaaa tcatacaatt cagagatgtt 21180 ggcatggcga gagttcttct tctacagggg tgatgtatat gaaggatgaa accagggccg 21240 acctagttta actcctagag caagaatcta aacaaagttc tatgttctca cagagagcca 21300 acttaattcc ctcataatga catttagcca aacaaaaagc tcagctcatc ggggctacaa 21360 atcctttgag aaggacaagt ggacaaatgt gagagagctg ccagggatcg atgggccgca 21420 ccagctccct gttcactact gggtgctgat tttaatgtac aaactaataa ctcttagacc 21480 actaagtaca gcagattcag tgtcatttta gctttgaaga acagacgctc acagcttttc 21540 aagccggcag tgttaaatga tgtatctcat tccctccacc ccttgagtca actgctgcct 21600 agccagatta aggtgtcaga ttgatttgtt ttatacatct tttgaccatg ctcattgaat 21660

39467A.txt.txt atttaggaag tttcttcagc ccatattgag gctgagatgt cccgtgggaa gcattaatca 21720 21780 aagtcacaga gactcgtaca ctgtggaaac acagcctctt tattgtagcg attagttttt 21840 gcagtaacac attaacacac tacagagctt tcctttatag aacaattgat ccttttcttg 21900 taagccacta cagaatgagg gaaattaact ctttaaagtt taatactttt tctcccccag tgtgaatatc tagaaaagcg ggggcttgct tttgctttta gccggcgact aaaactgaac 21960 aaattttagt tcacttctcc tggagggaaa ccctgttcct taggctgttg ggctggtcat 22020 22080 ttcgcttgcc tcatgtttgg ggagtctgtt gtttttgtcc attctttctc tctggtattt 22140 ccattctcca acaataagct ttaaatctcc ctttatgtcc cattcgtaaa taatggcaag 22200 tgcacttact tttttgtcct ccccattagg tcattcgtga ccattctaga aaaaaaatac 22260 ccttctattt ttttcctcta cagtactctt gtccatatga gacaatgtct tgtaacaatg cagaagccta atctccatgt caaagcaatt ttcattcccc agtgcacagc ctgctatcat 22320 22380 tttgtaatgt tttgtttctt attctaaaag aattaaaaag gaacagtaag ccgtcacggg 22440 ggcctgtagt ccttatctca gtgtctggaa atttggacag tgtattttac tgctgagata 22500 aaatggaaag aactccaagt tcagcaaatc gtaatgggtt taagttctat tgaaatcggc 22560 aaccagaaga tcagataatg ggggtccttc agttgtcttt ttaatcgggt tccccgcgag 22620 gctgaataga gacagagcag acacacagag tgaaaatata attcttggat aggttaagta 22680 catgtttgaa ctcttgcaag cagaagcgat ttgctgatga cttaatcatt ttctggtcaa 22740 ttatctgtaa gggcccttgc aactccatgg caattatgat gcaagttggc cttttgggag aaacaccagt ctctctgctt ctgtttcctt gtgacttcca ttctctgcca taaattttca 22800 22860 ttcatttatt atctttgcta gtatagaaac aactttctgt gtagtaatta gagccccaat acacacttta gctgtcatct tgttggagtc tggatgttct catggcctgt gtttgataag 22920 22980 tgctctttgt tgatttttga tgaatgtaca tctttttctg ggggcccagg gaaggggatg cctgtgatga caaaaggcag ggggttgtct gtcagcccgc ctgatataga gctatggatt 23040 23100 tattggtttt gacttggcaa gttgagactc atctgtcctt tacgtgagca gaggactgtc aataaggatg gtatcatttg cagtgcatcc agaaagacat cttcatttca aaggtcatca 23160 23220 ggaaaccttg gtaaacaaag ttttaaggcc taaccatgtt atagtaactt ggcatttaaa aaaatgtaat aaagctcctg tctatgccat ctgtgtactg tgtcctaacc atgcctccca 23280 aatggcagag ataccaaggg agggggacat gggtcttatc caatgctggc ttcaggaagc 23340 23400 aggtgaacag gcaccaggag ctgaccagac ctcaccagac atgaatgccg tgggcaaaca 23460 ttaagtggaa tcacagttgg atggacatgg gaatcactca ttgccaaaaa aataagcaaa tgccaactcc tcccattttg tgggaaggcc atttgtctgc attgaagggg gctgtaatgc 23520 ggtgatacaa atcctcactt aaaaaaaaaa agtatatcaa actagtggta gagtcatgtg 23580 gcacatcacc tctggtacat gggagtaaca acacttccag gattctatgg cttcaatgaa 23640 tgtccataag aagtatataa atgcaagttg ttctactgaa agatgaagaa caatggttaa 23700

39467A.txt.txt 23760 aaataaagat gttcggctta aggaaagtct gatttagaat gtgacttttc cacttgaaag gtagagggtt gtgatatgat ttccattact gacaggtttt tataatttct tgtaagtata 23820 23880 ttcttcctct tgcctctctt gccaccattt tggtggagtt aaatacgtat ctttccaagt aaagaaggga cgggaacatt aaaaatgctt cagacactta aaaaaataaa tgaagaaaat 23940 24000 ggcaatgttc ttatcctttt caacatttaa atttaacagt tcaacagatg cattacctct cagctcatca agtggtttag caatttccgt gagttttact acattcagat ggagaagtac 24060 gcacgtcaag ccatcaacga tggggtcacc agtactgaag agctgtctat aaccagagac 24120 24180 tgtgagctgt acagggctct gaacatgcac tacaataaag caaatgactt tgaggtagga actaatcttt attttttggt catctccctt ttcctttttt aaaaaattta ttttctttag 24240 aaatgtaccc aaatctgttt ttgtgttggt ttcgcataca agcatccccc aatagagtaa 24300 caggtagagc tgtgatgagg agcttccata gtccccattg gaatcatgag gctctgaccc 24360 actgccattt tttccccatt ccctggcttt tcagcttgtg tggaagactc atttggccac 24420 agaaaaggga actgtagaat ccaaagaaaa atggcagcaa gcagcaaaga cagagtgatt 24480 cattttccaa ggaagaggtc cctactccaa tagacctttt tcatatttag gttctgagag 24540 gtcaatgagc tgatacatgc tatgtgcaat ggtagctacc aatgttattt tcttaaaaag 24600 tctagaaacg ttgatggggg agtgatcatg gtttctgact ttgacattta gtccctttgt 24660 ggaggaaatg gtatgataat ttactaagta catagcataa gagatccatt gacatctttt 24720 tttgggattt tgtttctgtt tttgttcttt ttggaggaga gactcgtgtg ttttgcctaa 24780 gtgtaccttc acaagcatgc tgctctttgt acaaacactc tcatacacac ttatatatat 24840 ctgtgacgtg tatattctag atccacacaa agcagcatag agaattccca gaaagcaata 24900 tccatgcaac aatgaaagat gtgtggctat gagtaaggca tttctttatg ggctaatgtg 24960 gtgcctcagc aaacagtttt catcacaacg tgatgactct ctgtgagaca acactagcaa 25020 25080 atctcccagt actcacaaag gcattttgct gagccctgct ggctgaggca acagtagttg gaggtgggaa catggcaaga attctgcagg ctgaactccc tgatgatgag atcagacagg 25140 25200 ctgtggcttg acaaagttgg tccatttctt gtattatctt ggctagatgc tgtgccatct tgagggtagg aatttttct ccaacgtctg tgtgcacttg gaccttatgt taatattctt 25260 gctttcttct tgtagatagg tatccaggaa tacccaggaa gttccaaatt tcaaaggaaa 25320 gaggacacct tggcctcgct ctgtcaatta aggggtctga cccctagtac tcttcctgct 25380 tgccccctc cttttttcg gctcttgtcc ctacagttct tggcaatgca gaccagttat 25440 agtggcttat aaagaattga atatggaagc tcagcaatgg ggaagtcata gtttttcttt 25500 gaaagtttga gtagttatag tgtaagctac ctatttgtct ttgctctcta agactaatat 25560 25620 tgtgtgtttg ctaaatacat taaaagtgag aattcttcgt gtactgctcc actattttaa 25680 25740 aatctgtttt taaagtctca gttgtaatag agcactggct cactataatg acagagcact

39467A.txt.txt aqcaggcttc ttctaaagct gaagaatatg attatggcta accattttaa agaaatctca 25800 ttaagagcat cttttctccc ctgcctttct gctaagcctg ttgccctaaa ccttaagcta 25860 agagacttct gtgtgctagt gaattattta cattacatga tgacataagt atctgtttgg 25920 cancatacat caagcttcat gaaagaattg cccaagattc atgagatgac ttctgcattt 25980 ttgctatata aaatacccaa gaggacaagt ccttaaagtg cgcacgaggg ttttcgggtt 26040 26100 gcttaaacct tacctggttg gaatttaatc cgctacccac aggccagggg ccaaaatgac acaaacaggg gatggctggc atcaggaggt acccgacaag ctgctccatt tagcatcatc 26160 taaatcctct ttaatatgat taacatctaa tatttctctc tttgtgaatc atatccactt 26220 26280 ccagccaggc cacctctcct ttatctgcag tgtctatttt aagactgctt cactgcaagg 26340 agtatggggc ccgggcagga attttgtcac ttctcatgtg acttcggaca gttattggac 26400 tattctggat ctgattcctc cttcagtgaa aagaagggaa gaaagcagga ccatgcagtg 26460 tgtcctgccc cctctactca cacacttaca catccatatg cacacacgcg taccgaccac 26520 cacacataat cctaatatca cgaaatcgtt tttcttttag cctctcggtc tggctcattt 26580 actgacaaaa gtttcagata aggtgagccc ttcttttccg tgcctttgtg catggaggtc actgcttaag tgagatgctt aaaaagccac cgttcttatc gtggtagctt tgctagtgtg 26640 26700 ggccgtggct gagagccaaa agtagatccg gcaccttcag ctgaatacct ccactgatac 26760 tgtgtgcacg gctttacttt tgtatttaag tttctcctct taaggtcaag taaaatgaac ctatagttta agtattagca agtgaagagg atggcaaaat ggagaactgt gctacaaaca 26820 26880 gagctaaacc atggtagagg gactttgaag ctacgtctac acggtgcccc aagatccagt cgattccaag gaatcgtgtc acccagctta gtaggagctg gtcaaacaat aaaatgtctt 26940 attgattgta ttcccagact tctcaatcaa ttgttgggaa caataataaa atagctaaca 27000 27060 tttattgact gtttactaat gacctaggca ctcttctaag tgttttacca aaatagggct 27120 tatttaatgt gggtaataat aatgacagtg ataccaatat aataacaaga aaaacttcag tttgcccaaa gctttactat tcttcaagtt attctaactg ggcagaggca gatcgagcca 27180 gggagagaga aggaggtttg acgtctcttc actactactt tattccttct ttctctcctc 27240 27300 taccccttgt cttctctcag ccttctactc ccatctctgc ctctgtcaga agcttgctag tggcaccttt gtcactgctt agcaccacct ccgtccagcc cctgctgctg atggctctca 27360 aggctggaga ggctgctgac ccctggccta caggaaaata aagcagatgg ggaaagttta 27420 27480 ctttatgagt acaggacctt ctaagtggca gtagagcttg ttctgccttt tgtatcagtt 27540 tacacaattg ccagaattct tggcacggtg tgcagactta gggtggtgag cgtttgagaa 27600 gacccaaggg atgtggaaga agacacccaa ggggaaaaat acgaaataca cttttagttt 27660 27720 gtgctaaagg gcagaagctt ggccatatca caccgggtgg ggtgtcttgc ttctgtgcgt gagtgtgtga ggcacgcagg agaggggtgt gtaattatgt gctgtatcct tcatttctgc 27780

	•			39467A.txt	.txt		
tc	ctcacatt	taațgagatt	ggcaacaata	aatttgtctt		atggtatata	2784 0
tt	tctatgct	tcattctcac	: ttcactttga	agg gct tcca	aaaaaaattt	tatgggcaga	27900
aa	gagcaagt	ttgggattcc	ttcccagttt	ttaaatcata	ctgatacttg	tgactttagg	27960
gg	cgtatgag	ttggatttta	tcgcttttgt	tgttttcctc	acaactgtgg	caggaaaaga	28020
ag	atgacgat	ctctgtcagt	ttctgaggct	ggtttacctg	ttttgcaaag	agctccaccg	28080
ag	acaactaa	cttgtgtaac	tcacaaaggt	taattgcaca	acgtaaggag	ccaaaagaca	28140
ta	gcagctat	atgtgcagct	gcgaaaggca	gaatcatcca	aaggttggag	ggtttgttac	28200
cg	cctgagtg	taggttgaga	aaagaatgtg	ccagattcct	tcatccagtc	acattgagct	28260
ct	ctttctca	ttccagggta	ccgggaggta	gtgtttccca	cgccatggta	agccacacat	28320
cc	ctcctggg	cccctcagtg	gctagtcatt	cacctgtagg	cagggtctaa	gtttccagta	28380
aga	aatgacag	atctccccta	tcctcgctaa	aggcccaggt	ttggggatgg	aaggcttcaa	28440
aa	taaattga	atagggaact	tgattcactc	attagtggcc	ttatgaatgc	cattttctaa	28500
gg ⁻	tactaata	cctcactggg	cagatgctcc	atcttagaga	ctgtgggttt	gacatttttc	28560
tg	ggtgacac	atgacaggga	agaagggtac	ttccgcacac	ctttgaatgt	gttttcttac	28620
tt	tcctcttg	gaaatagaaa	ataaaaaaca	acaccccacc	ccacccccaa	cacacacaca	28680
cae	ctaataca	tacacacttg	ctgaatatgt	tctctacccc	atacctaccc	ttttcttaac	28740
cta	actcccac	tttcaataga	acccacattt	cagaagattt	aatatatttg	gaagactttt	28 800
at1	tcgcattg	tcațctcttt	aaagaaaaat	gaggacaggt	ggatttagga	agcgcttccc	28 860
tc1	tgctccaa	atagatcctt	aaatatgagt	gatcgtttag	aaaactggca	catgagtgag	28920
ago	cctttcac	tgctgttgca	gtcttttggc	ctcaaagctg	ctgagccgtt	taaataatcg	28980
cat	taacacac	tcttggtggg	tggcgaggag	gaaaagaaac	ccttaccatt	tcttcccttg	29040
cca	agtcccac	cgttgacaag	ccaaattgat	cttttaagag	atcaaatgaa	tgttctctaa	29100
ata	atatgtac	acacatggct	gcctggaaac	gtattccttc	cacagaatga	ttgcctgaaa	29160
tt1	tgaaggag	agcgcagtaa	agacaccagg	ttggaagtgg	ggttgaaggg	ctagggggtg	29220
				ggcttcactt			29280
att	tcaaggtg	ttcatcagta	taatgaagcg	ggcccattga	tttatcatct	atttggtaat	29340
			·	tttgtcattg			29400
aga	atcaactt	taaaacctcc	ttactcaaca	gctttattag	ttatagcatt	ccatgacctt	29460
				gtaatgtcgc			29520
				tggctatatc			29580
ata	agcagtgt	cttggcacat	atcaaagttc	agaggagcct	ttagaaaaaa	aaaaagatgt	29640
				tccttcagaa			29700
				tcctgcttca			29760
				gattgttcct			29820

	. ++<		39467A.tx1			20000
			•		t atcagttact	29880
					g cctctgtgaa	29940
_					tctgactgta	30000
acctaccctg	ı tggcttttct	ctctttaaaa	aaaaaaaaa	tcgtccttgt	gttttgtgta	30060
tggatgagtt	cacagtgaga	atagaattat	acaagggcag	gcgcacacac	aaaaaaatct	30120
ttgctttcct	ccctcacctc	ccgcaccccc	ccacaaatga	tctattggct	ctctcggcgg	30180
ctgtacccca	acaggcgaag	ccatttagca	aacacagagg	tagcggctg <u>t</u>	ggtgctggga	30240
cagtggtggg	ttttcccttg	cttcgaccta	cccctaaggc	cttcataatt	aattgtcctt	30300
cagcgatgag	gaaagttcag	aaacagtgtg	tggagtgatg	cctattgtct	gatattcagt	30360
tctccttgcc	ttggttcttt	ttcttcatcc	cacaaagggt	tatcaatggg	agaaagagag	30420
caagttctct	tctgagagct	gctggtggtg	gctgtagctt	tcagtgggat	gttatcattg	30480
tgttcagccc	atcctggatt	aaatgtctga	agaagttcta	acaacctttt	gaaagacagc	30540
ctgtttattt	cgcctagatg	aaacaaattc	atttagcaaa	ccaaagcttg	ttcgaagttg	30600
gccacccctt	ttcacatggc	agataacatt	atagatcaaa	tttcttcatt	tttcccccg	30660
caggatgtta	tttaacttga	actgtttggt	tctttgtcag	tcacagggca	gaaattttaa	30720
tgactattca	ctcactgctc	ttaaatacat	caatattaat	ttacaataat	acagtttttg	30780
ctaacatcct	ttttgatgaa	gcgtagacgt	ttaatacttg	aaagcagata	attagtttaa	30840
aaatattgtt	tctccttcaa	tgactgcctt	cagccaatct	tcaattctat	cttgtaagat	30900
gatgtgaaac	aaacgcattt	tgtcttcctg	cacccccaa	tttttggctg	agatacaaaa	30960
taaagatgca	gtgtggagag	agctatttga	gaagggtagg	aaaaagagaa	ccgtctatta	31020
atgatcatta	tactactgtt	cctgttaaat	agggtgaagc	caagaaaaac	aaatataatc	31080
gttcttccga	ggagagcagt	tgaactagta	aatcacagag	gtttaaaata	actacattgt	31140
agtgttcatg	acaacttcaa	ggctgaaggg	aaccatattt	aaaggcaatc	tctgtgtctc	31200
ttatagcagt	ttcttttgga	ggaagagacc	gacaggatgg	ccagaatcaa	ttctgcccc	31260
tttgctcttt	gaaaacaatt	tcacaacaga	ccttttggta	tttaaagaga	acctgtatat	31320
ggaagttgac	acaactaata	tagtcatacc	aaaaaggggg	tcataaaaaa	ttaaagttct	31380
tcttatgaat	ctttcatgag	aagcaatgaa	aagggacact	agtgtagcca	agttctttgt	31440
gctacaagct	cttcttccgg	gctctgagct	attgttcttt	cagctcctca	aacagacttt	31500
cactttcaaa	ctgacaaaag	tcacttaaaa	gccagacagc	tgtactaaca	cacccacctt	31560
actgagcaag	agccactggc	aggtgacaag	gcctgctgag	agaccttgtt	gaaaatgagc	31620
aggggtgact	ttctcgtgcc	ttaacgttgc	ttttgcactc	actttgagat	ggcccattga	31680
		ccccaaaaca				31740
		tccgtgatca				31800
		gcccttctag				31860
223 - 2		_		-		•

39467A.txt.txt cctqctgcct cttttccttt tgcccctcca ttcaqttcaa atctcactta aggttttcaq 31920 atttctgttg cctcactagg gttggataga aaacacccac caaagatggg tgcaaacctc 31980 accttcggat ttaagatcta ggcagagatc gttaggtggg tagtcctgcc tgcatcccga 32040 ccctcagggc agcagccgtc gtgggccatg ggaggcctcc ctgtgtgcgc attacaggcc 32100 tcccctcccc tgtcaccttg tgtacagtct ggtctgtgac actgatggtg attatgtcat 32160 32220 tattttgctc tgggggccct ggcacatctg cagagcccaa gcacatcttc tttgttgcgt tgqcaaatgt cccacgccgc aaatgcttca ttagccctgc tgccggcctc cttgccagac 32280 qcctgtgccc aaatcccggc ttctttttgc tccgttcttt tgtgtagctg atgatcatgt 32340 attcatcttc ctggttcttc cccattttcc tcgacttctg aactccagat gtcccagttt 32400 tcttgcccaa atcactccga agtctacaat gcgaaatgaa gtgactcttt acccttgaat 32460 ccttccccac tcctgaccac ctttcctact ttttttcccc caaatgaata gtgactttga 32520 32580 atagctcgcc accatgaaga ctaacgtttt caaacttgca atctgaaaag acaccaagtg 32640 attgcttcca gtttatgatg agagacaggg ttagaatgag tttggcatta ttagatattg 32700 cttattatct qtqtqccttc ctcctccqtc cccactctgc ccccctcact atttccttgg 32760 atcctttatt tgcacctgtg cattgccaca ttttaccaat tttctgaaag cactttgaaa 32820 tgtgagtaca gaaaatactc ttcatgcctc gctgtgcacg ttacagtctt ctgaaggttc 32880 ctttctctaa qtqaatcttc atctccactc taccctctcc caaaaccact gccccctcct 32940 tctqccccaq ccctcaacaa tqacctacta ttagatactt acagtgatta acacttggct gttttggaaa cagctaaaac atttctctct ctaaagtttt attctatata tctaacagag 33000 ccacagcttt tgtgaaggtg tactggtttc tacattagct gcagtaaatt ttagagctta 33060 atatcttggg ctgtgatgga tactacataa ttggtatgtt taattttccc ttaaatttga 33120 33180 attaattgat ctgtgttagc atattatgag cagcttttcc aatagagttt aactagtttt taaattctct aactactgca acataaaatg atttaaatgt ctccatcttt gagcaaacca 33240 taagatttta gttttcaggt gtagttaaag gagttaagtg tatattttat ggaaatcatg 33300 gttagatcac tgccatgaat tgtaatttga aattcaagac aaagactctg ttaagggtta 33360 aagaaaactt cctcagagga atgagttgcc acattgtacc gggttgctga gattttcaaa 33420 tacctatcaa agaggggcac aagaatatgc atgttgcaaa tattaggacc aatgtagcca 33480 33540 acaaqqtqaq aaqaqaqqtq gtcagatcag gcgggtgggc tccccaaccc attgtcagcc ctgtgcaggg agcatattgg gagaggctgg tacctgtcat tgaatcattt ttcaaaaggc 33600 tcgagatata tccaaaatat tcctaacctc ccagttgccc accattatgg ttttatcacc 33660 catgagtttt acttaaacct tttttaaact taatctcatt gtcagaatat accactcctt 33720 aagataataa ttctctaagt gtattacctg ctgggaaaat actatcttct ttttacggct 33780 ctaaacgtga ttcccctaga actccacagg gatagccctt gttataatat cctgggattg 33840 tgaagagggt tgtgtccata ttctccattt cctttctgat tttacagact ttgatcatta 33900

39467A.txt.txt ctccctctta atcttcatct ctccagatta aggagctcta atcctttta aaagcctaat 34020 ctcatacagt aagtgggctg ccctggatca ttttagctgc cctgctgtaa tgcgcttcca gcctgactgt gtttttctga gggacagtta cagttactaa ctcacacagc agaactccag 34080 gtgtgggcag tcatgccacg gtttggtgat ggtgccttgt gcacacccaa tgggactttt 34140 34200 ttgattaccc caaaagttta tcctcagaag ctggaattct tgagttggat ctcagtagtg cttattggtt aaaatgatcc tatgagacca gctgatcaga ctcttggcaa atactctggc 34260 34320 aaatatgatt gtgtctatag gacataccca gccaaataga aaataggcag atccaccctg ccctccagat gttttcagtg ttcttgtaga tcaagcactg gggtatttga catcatgagg 34380 agatagcctt agtcttgaac ttgagtctat aataatgaca gctctggggg aaagctccag 34440 34500 tttctgcttt atttgatgtt attctcaggc aggcaatgaa atgttcacct gcaagtagtc aatattttat ataaaacatc cccttgaaat cttacaaaga aaatgctttg gggagtcttt 34560 34620 ccactgtcag tggtcctgga tcaataccgt tgtaggactt acagcatgga ctctccagcc 34680 aggccctggg atcaaatccc agctctgctg ctttctagca gtgaaaccct ggcaagtgtc 34740 ttaccctgcc tgtacttcag tttccttatc tgtaaaatag gggatgtaat agtgactact tcacagagtg ttgtgagaat taaatgaatc tacacaattg tattagcaca aagtaagtgc 34800 tgtataagca ttcacattta ttcatttgca gagccaagta aatgttacct tgttgctgtg 34860 acatctgtgg tccaattatt gcaccatttc ctgctgaccc taaataggaa agtaaacaaa 34920 34980 cgggcaatga gggagctctc atcagaattg gaacatatat tcaacgtaaa actggttttc 35040 acaagagcaa gtgttcctgc tctgaatgtg gctgaaaagg cgacactagc ctggaacagc 35100 tccaggactc tggggtcatc cgttccagat gagaaggaca cgatgagatg ctgggggtgg tggaaggagc actggcctgg agggtctggc tctggccata cctgcctcat tgtggtctac 35160 35220 tgtgctcacc ttttggaaag tgataagatt aaattcaaga gtttcattct agctctgaaa 35280 ttttgtgact ctagagtaga ggggcagttt cattctagct ctgaaatttt gtgactctag aatagagggg tattctgcat tctctaaata aagtctcttt tgagtcttgg tcatgttgca 35340 aagctttaag cagtgagtat agaggccctg ggaatccaga tggcttccat gtgaggcccc 35400 ttctaccctg gtgactctgc tgcagcttaa ttatctcagt caaaatctcc agggtgccca 35460 ttttcgtttt ctcccaaggc cctatttgca gatctgaatc tcaacagtgc ccttggagac 35520 atggcaattc ccttactggg attatagaga ctaatttttc aaattcatac acaatttatt 35580 35640 gactgaattg gcactatcat tagacttgct gctcacttta tttgttgcct tggccagggt 35700 ggccaaacaa tgaggaaatt tgtcagtgaa gccctcatgc cattgggttt tctcacacat tccatgcagg cctcaacaca gactatcagc atttataata tgcattaact tctatataat 35760 35820 gtacgtctcc tctctttcag agcagaattg gctatgtttt tttttttatt cttttatttt tttatttttt tgagacacag agtgttgcac tgttgcctaa gctggagtac agtggcatga 35880 tttcagctca ccacaacctc cacctctcgg gctccagcga ttctcctgcc tcagcctccc 35940

39467A.txt.txt aaqtagctgg gattacaggt gtgcatcact atgcccagcc agaattggca gttttagatg atataactac cttccctact aagcctactt ggtagtgttt gcaaaagcaa caccaccctt 36060 ttctttaaat attccccaaa tgatagtaat atagatcatg aaagtctttt cccttgagat 36120 tgttttgtat gtgtgagagt ttgtggttgg gaggtattga gtcctcatac aagccatttg 36180 36240 gatatgtatt cttcatattt cttatggcta ttgcacctaa gttctgtttt cttaaggcta cattaacatt ttaaattaga atatggtgct aaaagtgact ttcagtaaaa ggtaatgtat 36300 tccctgagaa caagtaaata cttgggcagg gagggatggt ttgagtagag gtgaaaacag 36360 agaaatgatg ggaagctgac catatgtaga agaagctgaa aggtcatggt ttcaaggcca 36420 ctgtgtttcc tttcatttag agcatccact tttaaagatt tatcattttc agtgacctga 36480 36540 aggcgtacaa gataatctgt gtagatacct gaaactgcct ttcaacaagg ccagtcctag gtattgacag catcctaggt tgtcccaccc taaacattac ctcaagtccc attgggtagg 36600 36660 agtctagtgg acttccaaaa gcccccgagt tcattctgca atctgcctgt ctttgcaatc tatttacctg tcttgaaaaa gggattccaa agcccttcac aagctcttaa gtagcatttg 36720 36780 aaatacagcc catccttagt tttgcaaagg gtgattgcag agaaagacaa atagaattcc ctggaaatac agaatagaat ttctctgaca gaacaaagat cttgcagtca aaaccaaggg 36840 atgggattga ggccaataat ccccatcctt tcctaaagca actcggatat tatttggggt 36900 gtcataagct attgccagca gagtgccagc atcccccatg aacttgtgtt ctctgaagct 36960 37020 ctgtctgatt tcctaccatc tgtatcacaa gcgctttctt tggtgtttac tatgagcaat ccctttctca tcacaacctg cctgaacccc acttcctaac agcttctccc taggctcctt 37080 actcacattg ctccatcaat agcaatacag ggcacacaga ctagttttaa tattagccta 37140 ggcaaagctt aattatgaag gtaaagctgt ggcagaaaac aatcacgtaa tacattctcg 37200 37260 aacgaaacag gagtaactgt ggattatctg tgccccagct tcccttcatg caatattgga gtgtttgtgc tatgttgttt ttggataatg tcccatccaa gaatggcacc aagcttggcc 37320 37380 ctgcttcttt taccacctca cccagtaatt gtagcaaaag ttaaacttca agggctgtca 37440 gcttgtcttg aactcagaca ccaatggcac caaatttacg gggctgactt aaaggggaat 37500 ttgttaacac tacaaagtga ctggtatatg attgcagggc ttatttttcc acctaagtat 37560 tgagctgatt tgtcagatgt gtcatgaagc agggatacat tcctctgttt agcacattta aatatgtact ggcaggaaag ctcccaatta aacgttccta atcagagcag ggtaagactg 37620 aagtcttcct ggtccttgac caccacgtgt gtggtttatt aactctgttc ccgtagacat 37680 aggcagcctt aactccatcg ggggaatggt ctggccttac aggtcgaatt caagtgaatc 37740 aatcgaacta tcctccaaga tagagcagaa tgaaagaccc aggatcagtg cagaatgaaa 37800 gaccattagg cctctagaaa agctgttagc cctcaagttt ggctaaaagc aggggctggc 37860 aaagtatggc ctatgggcag agctgcccct caatctgttt ttatggcttc aagctaagaa 37920 tgacttaaat ttttaaacag ttgtaaaaaa taaggagaat atccaaccta gaccaaatat 37980

			39467A.txt	+v+	•	
ggcccacaga	gcctatgtat	ttattacctg			gctgaccacc	38040
ggctgaaggt	tttttctctt	ctgtgggaca	tgaactctct	gagattcctt	ctagttctga	38100
agttccaaaa	ttctgtgatt	ccttttttt	ttttttttg	agatggagtc	tcactctgtc	38160
acccaggcto	gagtgcagtg	gcatgatctc	agctcactgc	aacctccgcc	tcttgggttc	38220
aagcaattct	ctgcctcagc	ctcctgaata	gctgggattg	cgggcgccaġ	ccaccacgcc	38280
cggctaattt	ttttgtattt	ctagtagaga	cggggtttca	ccatcttggc	caggttggta	38340
ttgaactcct	gacctcatga	ttcacccgcc	tcagcctccc	aaagtgctgg	gattacaggc	38400
gtgagccacc	gcacccggcc	aattccatga	gtctttgatg	gaatagtctt	ggtccagctc	38460
ttacctgaac	agcctaccag	atgagcaatt	tctgcacagt	gcttccagtt	gtttttaaga	38520
tcttaacagt	atctgtgtag	tatctcaggg	ggagagaatg	aggtattagg	ttttagtttt	38580
tgatgctttt	tccttgattt	tgcttgcata	tttgtttgtt	tgtttaaact	tggaatcact	38640
ttttaagacc	tatgcagagt	ttgggagaga	aggaaaattt	gcttcatcgc	gaccaataat	38700
gtgacaatta	tgtttcctaa	cacgtataat	accaagacct	ccatgtgtga	gcaaataaac	38760
tagccactta	aagcacgttc	actgaccaaa	tttcagcccc	acgaaataat	tttgacagtc	38820
tctcatagac	atttgtcatt	ctgctcctag	caagctagta	ctatcttcta	ctggggctat	38880
ggaàgagatg	gttttactta	ccttgatctc	tacatgcaga	attgccaatg	gaatacttac	38940
ataatttaaa	atgtatgcac	aatttattaa	acgtagaata	gaagatgtta	agacatcctt	39000
ttctattacc	tgaaagtcac	aattattcga	aatgctcaaa	tctagaacat	tgttgataat	39060
tatataatat	tttaacaaca	catatgttat	caacatcata	atgctgtaga	aattttattg	39120
tgaattttgt	attttctaaa	tactcttaaa	agacaaagac	tcaaattcag	gtagaaaaac	39180
aaagaagata	ctcagggtgt	atctctgccc	ttcattcatt	gctgtggtca	gagaagtctg	39240
tgtgaggggt	ttggccggta	gcagcccccc	agatccgtac	actgcagacc	aaaattcagc	39300
tcctgtgatg	cttttccatg	gagtttccct	gtcaattcaa	ggtagatcct	caacctccct	39360
ccttggcagt	ttgcatgtga	ctgttcattc	tttttattac	atttcctcca	gggggccatt	39420
ttcaccatgt	catatctgtt	tgctatcagc	atttataagg	gctggtgtgg	cattggagga	39480
tgtcaagtgg	tctgacttgg	aagtgtactg	ccacaaactc	catgtaggtg	acaggaggag	39540
agacctgctt	tcccgttgcc	actttttgga	ttatccctgc	aactctttcc	gtctggctga	39600
caaaaacctt	ggggctattg	ggtggctcat	cacttctgct	ccttctctag	cctttccctg	39660
ggtttgcttc	ccccaacccc	cacaccccct	cgcacattaa	catgacattg	cctggtgagc	39720
acagaagaga	gcagcttcca	ccagctgaaa	cctctgatct	caaactcact	agagagtttg	39780
gcttcgggat	tttggcaaga	aggccgattg	cccatcaggt	cagcatgaat	aaagatttct ·	39840
ttcttccctt	cttttttaaa	gtcaagcatc	aaccgaaact	gctcccaaag	ctctgtctct	39900
caagacaatt	taaccccttt	cacctaagta	cattttctat	tttgaatgca	tggtactttg	39960
ttttattctt	ttcctgtgag	atgaccaaga	aatctactat	atgtaaaatt	tgaaagccaa	40020

39467A.txt.txt gtcaattcta aaccaggctt atcattttta aagtatgttt atccagcttt gtagtaggaa 40080 caagcagact gtttgaaggc cacatacttt tcaaaccctg gttgcaacac gtctgccccg 40140 ttttgaaact gtctttatct agccgagaaa acgaaaatct atttgacaaa gtggcactct 40200 ggccagttta tcttgcaata tggctttagc tcactgagtc tattgatttc cttaaattaa 40260 tgtttacaga atgctactga attttgctca acagaacatt gttctttcga agctttatat 40320 atatatatat ataaaagaga tacagactgt tattgccatg tgttcctttg tttagaccaa 40380 ggaaacatag tttttaggtt tttttttttc ttaagacagc cttgaactat agccacttcc 40440 tacaagcatt tacttttcac atatttaaac agcaaaacat gtaactagaa agtgggccca 40500 aactgcatgg gtattagacg aatctaatcc tcagtgttcc tgaaagctga atgccacctg 40560 gagcatcaga gggagaaagc ctttagtcct aagcccagat gttgctggag aaccttcctc 40620 tgcctcattt ggggtaactc ggcaggcacc cgaaagcaac ttcacagcca gtgctcctgg 40680 atcctgctag tttttccaaa cacaagcatc ctaataaaat tcaaacacca tttagctgtt 40740 tgggaactct aaatataaca tcttgccctt tgaccacggt gctcagtgtt caatacacaa 40800 40860 aacctaatct ctaaagatga ttttaaaact gaccttccca gagaagtaca cgtatccatt cagctacgaa cagtgcagaa aacaggattt tgactcataa ttatgaaatg gccaaaataa 40920 40980 aacttaggga acacaaagca acttttctca accggttgac tcagccaaca aactcaccca 41040 agcgaacctc ctcagagcac ctctcaaaac gatgctttgc agacatttat taatcacagt 41100 gaatgcttcc caggaattag ggctcctctt taaaatctca aacttgtaaa ccaccttata 41160 tttggatgat attttatgct tcccaaagtg cattcatgtt ttcttttcca tttgatcctc ccctggaatg agagggcact ggaatagaat ctcaggattc actgtgtata gcatcctgca 41220 41280 ccattccttc tcttctggag ggcctgttag tccccggctg tacacacagg ataaatgcat 41340 gcatgactgc aaagggagac ccttagtaac cacatcttgt gaccatattt tacagctcca 41400 tgattcctct tttcagcctc tggcaggaga gtttagtgtg agtgagacag tgaagaggag 41460 cagcaataac gtatctgttc ttggcttttc atctgataat ctctatgagg agttactaaa 41520 gcatctgagt ttatccattt aagtccactc tgtctgcagt gtaagtcccc agcttgtgcc 41580 actgctgtca ggagatgagt ctctccttga tcgatattta cttaacaaac agcagggatg 41640 ggagagtttg tttagaggaa tcatgtgcac tctagggtga atgaatgctc gggaaagtac ttcaactatt tgtctccttc cctaagattt ttgtgtacgt gtgtgtgcac acacgtgtgc 41700 41760 agatgcccat tctctttta acttctccaa agacacttcg aagtcatcta gaaaaatacc 41820 tcgctatgta tgattggtac atcattatac cgttaaggag ctaatgatgc agatgcagtt 41880 tttctaaccc agcaaagttt ggttcttctt ttgtgctctt atatagagca caaaagagac 41940 tcttaggata aactaaatgc acaagcatct acctttgacc cctttcagat gagtggaagg gaagaaaata cggatggaaa caataaaagc agtttgacaa ggcagctctt cactatgtat 42000 ttttgatggc attacctata tatttttaaa ggcccacagg gacaaaaagt aactttctcc 42060

				39467A.txt	txt		42120
		agctgcttca					42120
.,	acggtgtgaa	aattgagaga	gcactgttct	ttcgagttcc	ctgaaacaat	tgcttgaagg	42180
		cctcttgaat					42240
	ttgtttctgg	gtgtggggag	aggctggggg	gtggctgggg	agttatttat	ttatttgatt	42300
	ttgtgaatcg	gagttgtaaa	agccatctga	aatattcatg	cagaatagtc	tgagaagccc	42360
	gtttctgttt	tatttaccgc	acagtagaac	agccacagcg	gattagttct	acaatacccg	42420
	taacaaaagc	ccaacagctg	atgcatgtga	tgttaggagg	tgacaaaaca	gttaaagtat	42480
		acaggcaagc					42540
	ctctctctcc	aaggcgagca	gtgaagagta	tccaaaatac	cagtaccctt	ttctccttga	42600
	cattgtcttc	ttacagtcag	cattttattg	cccttttata	gtataaaaaa	aaatggagga	42660
	ggaagaagaa	ggaaaaccca	cacacaaact	aattcaccaa	aatactaggc	aggattgtac	42720
	tttcccattc	gctagccatg	cctgccagta	cacgtgtcct	tttccatttc	tccatcgaag	42780
	caagtttgaa	aaaaaaaatt	agcttaaaag	atcagctata	aagatgattt	cccttgaaaa	42840
	gtttgtaatc	tattgatagg	cttgataggc	cattggagcc	tttggttacg	ggttgggggg	42900
	tgggtggcca	gggaaagaag	tcgatgcctg	gtttgttttc	tgtccatttc	agtgaagatc	42960
		tgaaatgagg					43020
	tgtccatgga	gaactgagca	aggggcaagg	tttaggtccc	ccgcaagagg	ctgatgaatg	43080
	agcttacgga	cggttcagag	gtgtgaaaaa	tgagcttctc	tgtctccaga	aaataggaga	43140
	ggctgtcttc	tttttaacct	ttgtaattcc	ccttctattc	tctgtgacat	tcattcagct	43200
	gccaagagcg	tttggcaagg	tttgggccag	cgagcacact	tccagtgacc	gctaaccttg	43260
	gtatgtcctg	acacttatga	tgagtatctg	caggacacag	aaggcaggca	gcctgctatg.	43320
	tcaggctttt	attatgtact	gcagaggcta	gggacagtca	gtttaataaa	acaaatcatc	43380
	cttgaaggta	aagcaactgg	gaagaggagg	aagacaggag	aaaaatgtgt	ctttgccact	43440
	cattccgatg	gaaaaaaaaa	agaacagcaa	aacaaccacc	cacccaacac	accgtgtgtg	43500
	tgtgtgtgtg	tgtgtgtgtg	tgtgtgcgcg	cgcgcgcatt	cgcgcacgca	cacacacgcg	43560
	caacccagct	gtggactggg	cagacttgaa	aacctcctct	cattttctgc	atttcatgga	43620
	agcccagaag	gctcttgttt	gctctgagga	gactcaagtc	tgtgatgaaa	ttggtagaag	43680
	ctgatagcca	acccccttca	aatttatgca	tatcttcaag	tacctcatta	ctttatattc	43740
	ttctccaaat	atcaaggcaa	gaccatctgg	ggtgacgttc	ctatattggg	atgccttttt	43800
	atcaaaacaa	agtttccact	ctcctctcct	gaggaacgct	gggcaaagca	gctcccacaa	43860
	tagcctcaga	gttccagcca	aagactttgg	aagccttttg	ttttttccct	gtggcatgtc	43920
		gccttctccc					43980
	attccagtga	cttgattgac	tgttaccacc	tgatgctgag	gagatactct	agggttcatt	44040
	ctgcagattg	ttgggttcta	ttaaaagaaa	cctagataag	ggattacttg	tcactaaggg	44100

			39467A.txt	-txt		
attttctgc	a gatgtttatt	ggtgatggga	aagccattag	gtgtgaagag	gtgcagaaaa	44160
atatggaca	a catcattctg	ataagactgg	tttctaagat	gctcccacaa	aacatcagaa	44220
agtaccccc	t attattctgt	taaatggagc	tgggtgtttt	caagcagagg	taaaggtctc	44280
tttttccat	g ggtgatgttt	ctatgtgtgg	atgaaattca	ctggaaccct	ctcagaagat	44340
cagttgcta	c ccaaaagtgt	acctctggga	gccaccaaac	acatgagttg	ctccagtagt	44400
tcagtatct	c attacaactt	tcttttgtcc	agtccagtcc	attgcatgag	tatcacctca	44460
aagtaagca	tatattaact	aatcatttta	tttgttcaca	aagaattcat	ttcttcccaa	44520
atataaacca	a ataaccaaag	tctcctccag	ggcatctttt	ataccatttc	catttatttt	44580
gaagttacta	gattctctgt	ggtttttcaa	gattacagag	gcacagcttt	tcaaggtttt	44640
ggtgcctcat	: ataaatagta	gaaattgctg	aaaaagcatt	aaaagggagc	cagcatcgtt	44700
taatgcaaag	acaccttacc	tcacagtaat	ctcttcatct	catcatttct	tcatctcata	44760
caatctcatg	ctttcttcat	ctataaagtg	atgatttctg	agatctattc	gaactctttg	44820
aattctacct	: tactttacca	ttattttaaa	cttctttttt	tttttttatt	tttgagatgg	44880
ggtctcactg	tcacccaggc	tgtagtgcaa	tggtgcaacc	tcagctcact	gcaacctccg	44940
ccacctgggc	tcaagccatc	ctctcacctc	cacctcccag	tagctgggac	cacaggcatg	45000
tgccaccaca	cccagctaat	ttttttgcat	ttttggtaga	gacggggttt	catcatgttg	45060
ctcaggctga	agcttccctt	tattaagtat	tgttaaagta	ttaagtaact	gccactctag	45120
agcaatatgg	agtaaagcag	aaggcaagat	ctcactatga	gctatttacc	aaataacttt	45180
gcaaaagata	ctctgctgag	gctccttatc	tagagacacc	ttatgatgag	gtaattgaaa	45240
gtacataaaa	gtagataaaa	agttaaacag	catcaagaca	caaatgcaaa	aggtgataaa	45300
ggataaccta	tgattgccac	cacaagaaag	gaatatttaa	aacagattaa	aacccactaa	45360
aaaccattaa	caagcatgac	gaactataaa	aatgatgaag	aggagactgc	atacaacccc	45420
caaagaagtt	gccttgttct	catgcaaatc	ctacaactac	acttccctcc	ctcccctgct	45480
gctgatgttc	tagatgtacc	tcttctctct	cctctgacag	tcttgaacaa	tgcctgccct	45540
tcccctgtcc	ctggttcccc	agacctcctg	tgcagttctt	ggtgtgggca	gggcttccgg	45600
ccttctctgg	cttctctggg	gcagctgccc	acaccttcac	ccctcaaagc	tctctgccat	45660
gtcatgctgc	atccctgagt	gctcaaggaa	catagaattt	cactgaggct	gtattgccgt	45720
tggctgatga	aaccaccctt	cttgaaacgt	ttattttaat	aaatgcctat	aattggccag	45780
gtgcagtggc	tcacacctgt	aatctcagca	ctttgggagg	ccaagacggg	cagatcacct	45840
gaggttggga	gttggagacc	agcctggcca	acatggtgaa	accccatctc	tactgaaaat	45900
acaaaagtta	gccaggcgtg	atggcacttg	cctgtaatct	cagctactca	ggaggctaag	45960
gcaggagagt	ctcatgaacc	caggaggcag	aggttgcagt	gagccaggat	catgccactg	46020
cactccagcc	tgggtgacag	agcaaaactc	catctcaaat	aaataaatta	ataaatgcct	46080
atgattatgt	ttctgtagca	tttggctaac	agctcccaat	ccaaggagtg	agagtgggca	46140

39467A.txt.txt gttgctccgc ttcactgttc tccagccaca ttccctcct cagtgatgct catttgatag 46200 46260 aatgtggagg attatctttg ggggtggagg tgactgtgct agaaaagatt gcttcacgaa 46320 tttttatttg tataatgtga gtgggagggc taagctctcc tccaacaaat actcatgtat acaagacatt tgggaggaaa tcacccaaag gcctgtagaa aatccacatg aattctcagc 46380 46440 agagaatggc ccttgaggtg tatgggtttg cacattcatg gcggacaagg cggcactttg aaggattttc caggcaacac tgggaattat gtcctaagaa atgggccagt gtgaaagtct 46500 46560 ttaggagggt ctgataaaaa tgtaagctta agactgattg gccccaaaag gagtcccttt 46620 catttttttc tgcagagtta ttacatttct ttataaacaa caattaactt gccataggga acaatgaact tctttgtcca attttaaacg tgaaaaacag tgatgtcggg tgatgattct 46680 ggttttcttt accagttact actattgtta aaaagtacat tgcacccaag gtgggaagaa 46740 46800 agagatgaaa catgttcaac attacactac ttccttttta ctttggtacg tggcatgtct gaacttagat gaaatgtctt tcatctcttg tatatgcgta gataaatatg gctacatgta 46860 46920 cacctatgat acgtttatgt cctcatacgt ctgcacttaa tgtaaaaatg aaactttact 46980 ggtgtataag taccccacta aaagaaatct actaagtgtc aatgtgtact tggaaaatca tgagttcatg gattattctg tgattccatt atgttggtgt ggggatagat agaccatgct 47040 gtactataag taacttccaa agaacactaa ataagtacat cagtagctac tgctttcctt 47100 agtcaagaga tcagattaat aagtaattaa gagaacacac acacacaca aacacacata 47160 catattaatt gctgtggaag aaaagcctta agaaattggg gttctaaaat gaatatttgg 47220 ggaatgttta ttttggatga taaggacctt gaggaatttc cttaccctct ctgagcctca 47280 gttttctatt gtgtaactgg gataataaca ccccttagag agattgggag aactgaatga 47340 cataattcac attcagtaca taaaacatag cctggcaagt agtaaatact cgaaaaaagt 47400 tagtttgtat tattattatt atcagctgaa taaatcactc tcttatggag caattctaat 47460 ctcaaggtta agtagtttct gatgtaatat tttaggatca gttttgtgac ttcatgttaa 47520 tattattatt ttactccttt atgtatatag aatactttat attgcagatt aatatacaac 47580 ttagcatctg agtcaacaat cctctgagac aaacagataa ctgagatttt agaagatttt 47640 cttcatttaa agcttgggtt taatttataa agaagcccaa ctatttgtta ttctattttg 47700 agaacgtatt ttgttttcat catggcaatc aaaaagaaat aggattcaaa ttctgaaaaa 47760 ataattggag actttcttct ggatagcact tatttaataa agtgaggaat cccaaaagtc 47820 acatcccata ttcctatcct aatatccaca atgaaatccc agtttttcaa taggtctgcg 47880 ttggatcttt catacactct tcttaaaaca aagctgtcaa ccccacatca caatgcttct 47940 atatataatg actttacatt aaaagaatag aagccagcta tttttagaaa atgcaggtgc 48000 catgtaagcc cctttctgca agaatgatct tagctcagtt tccttggaat aactgtagac 48060 ttgaaactga aaactttatt aatgccattg tctccttgta tcagcaggtt ccagagagat 48120 tcctggaagt tgctcagatc acattacggg agtttttcaa tgccattatc gcaggcaaag 48180

			39467A.txt	txt		
atgttgatco	ttcctggaag	aaggccatat			gatagtgaag	48240
tccctgagat	tttcaaatc	ccgaactgc	tacaagagct	gcttcatgag	tagaaatttc	48300
aacaactctt	tttgaatgta	tgaagagtag	cagtcccctt	tggatgtcca	agttatatgt	48360
gtctagattt	: tgatttcata	tatatgtgta	tgggaggcat	ggatatgtta	tgaaatcagc	48420
tggtaattco	tcctcatcac	gtttctctca	ttttcttttg	ttttccattg	caaggggatg	48480
gttgttttct	ttctgccttt	agtttgcttt	tgcccaaggc	ccttaacatt	tggacactta	48540
aaatagggtt	aattttcagg	gaaaaagaat	gttggcgtgt	gtaaagtctc	tattagcaat	48600
gaagggaatt	tgttaacgat	gcatccactt	gattgatgac	ttattgcaaa	tggcggttgg	48660
ctgaggaaaa	cccatgacac	agcacaactc	tacagacagt	gatgtgtctc	ttgtttctac	48720
tgctaagaag	gtctgaaaat	ttaatgaaac	cacttcatac	atttaagtat	tttgtttggt	48780
ttgaactcaa	tcagtagctt	ttccttacat	gtttaaaaat	aattccaatg	acagatgagc	48840
agctcacttt	tccaaagtac	cccaaaaggc	caaattaaaa	aagaaaaata	atcactctca	48900
agccttgtct	aagaaaaga g	gcaaactctg	aaagtcgtac	cagtttcttc	tggaggcaaa	48960
gcaattttgc	acaaaaccag	ctctctcaag	atgagactag	aaattcatac	ctggtcttgt	49020
agccacctct	ctaaacttga	aaataggttc	ttcttcataa	gtgagcttac	atcattcttc	49080
ataaagaaaa	atcctataac	ttgttatcat	ttttgcttca	gatactaaaa	ggcactaagt	49140
ttccaattta	cgctgctcaa	ctttgtttat	atgcttaaaa	ggattctgtt	tacttaacaa	49200
ttttttcccc	taaaatacta	ttttctgaat	acttccttcc	agtaaggaat	aaaggaaagc	49260
ccaacttggc	cataa					49275

<210> 2 <211> 3097 <212> DNA

<213> Homo sapiens

<220>

<221> misc_feature <223> Prox-1 DNA

<400> ggcacgaggc cccttttcca gaatcacttg cactgtcttg ttcttgaatg agaaaggaag 60 aaaagagcct cccattactc agacccgtgt aaacattatt ccccccagga gaaaatggtg 120 ttattcaaat gaatcataat aaaatagcct ctaaacagtt tctaagcggg agcctccgtg 180 gaactcagcg ctccgctcct cccagttcct aagaggtccc gggattcttg agctgtgccc 240 300 agctgacgag cttttgaaga tggcacaata accgtccagt gatgcctgac catgacagca 360 cagccctctt aagccggcaa accaagagga gaagagttga cattggagtg aaaaggacgg tagggacagc atctgcattt tttgctaagg caagagcaac gttttttagt gccatgaatc 420 cccaaggttc tgagcaggat gttgagtatt cagtggtgca gcatgcagat ggggaaaagt 480 caaatgtact ccgcaagctg ctgaagaggg cgaactcgta tgaagatgcc atgatgcctt 540

ttccaggago	· : aaccataatt	tcccagctgt	39467A.txt tgaaaaataa		aatggtggca	600
cggagcccag	tttccaagco	agcggtctct	ctagtacagg	ctccgaagta	catcaggagg	660
atatatgcag	caactcttca	agagacagco	ccccagagtg	tctttcccct	tttggcaggc	720
ctactatgag	ccagtttgat	atggatcgct	tatgtgatga	gcacctgaga	gcaaagcgcg	780
cccgggttga	gaatataatt	cggggtatga	gccattcccc	cagtgtggca	ttaaggggca	840
atgaaaatga	aagagagatg	gccccgcagt	ctgtgagtcc	ccgagaaagt	tacagagaaa	900
acaaacgcaa	gcaaaagctt	ccccagcagc	agcaacagag	tttccagcag	ctggtttcag	960
cccgaaaaga	acagaagcga	gaggagcgcc	gacagctgaa	acagcagctg	gaggacatgc	1020
agaaacagct	gcgccagctg	caggaaaagt	tctaccaaat	ctatgacagc	actgattcgg	1080
aaaatgatga	agatggtaac	ctgtctgaag	acagcatgcg	ctcggagatc	ctggatgcca	1140
gggcccagga	ctctgtcgga	aggtcagata	atgagatgtg	cgagctagac	ccaggacagt	1200
ttattgaccg	agctcgagcc	ctgatcagag	agcaggaaat	ggctgaaaac	aagccgaagc	1260
gagaaggcaa	caacaaagaa	agagaccatg	ggccaaactc	cttacaaccg	gaaggcaaac	1320
atttggctga	gaccttgaaa	caggaactga	acactgccat	gtcgcaagtt	gtggacactg	1380
tggtcaaagt	cttttcggcc	aagccctccc	gccaggttcc	tcaggtcttc	ccacctctcc	1440
agatccccca	ggccagattt	gcagtcaatg	gggaaaacca	caatttccac	accgccaacc	1500
agcgcctgca	gtgctttggc	gacgtcatca	ttccgaaccc	cctggacacc	tttggcaatg	1560
tgcagatggc	cagttccact	gaccagacag	aagcactgcc	cctggttgtc	cgcaaaaact	1620
cctctgacca	gtctgcctcc	ggccctgccg	ctggcggcca	ccaccagccc	ctgcaccagt	1680
cgcctctctc	tgccaccacg	ggcttcacca	cgtccacctt	ccgccacccc	ttcccccttc	1740
ccttgatggc	ctatccattt	cagagcccat	taggtgctcc	ctccggctcc	ttctctggaa	1800
aagacagag c	ctctcctgaa	tccttagact	taactaggga	taccacgagt	ctgaggacca	1860
agatgtcatc	tcaccacctg	agccaccacc	cttgttcacc	agcacacccg	cccagcaccg	1920
ccgaagggct	ctccttgtcg	ctcataaagt	ccgagtgcgg	cgatcttcaa	gatatgtctg	1980
aaatatcacc	ttattcggga	agtgcaatgc	aggaaggatt	gtcacccaat	cacttgaaaa	2040
aagcaaagct	catgttttt	tatacccgtt	atcccagctc	caatatgctg	aagacctact	2100
tctccgacgt	aaagttcaac	agatgcatta	cctctcagct	catcaagtgg	tttagcaatt	2160
tccgtgagtt	ttactacatt	cagatggaga	agtacgcacg	tcaagccatc	aacgatgggg	2220
tcaccagtac	tgaagagctg	tctataacca	gagactgtga	gctgtacagg	gctctgaaca	2280
tgcactacaa	taaagcaaat	gactttgagg	ttccagagag	attcctggaa	gttgctcaga	2340
tcacattacg	ggagttttc	aatgccatta	tcgcaggcaa	agatgttgat	ccttcctgga	2400
agaaggccat	atacaaggtc	atctgcaagc	tggatagtga	agtccctgag	attttcaaat	2460
ccccgaactg	cctacaagag	ctgcttcatg	agtagaaatt	tcaacaactc	tttttgaatg	2520
tatgaagagt	agcagtcccc	tttggatgtc	caagttatat	gtgtctagat	tttgatttca	2580

39467A.txt.txt 2640 tatatatgtg tatgggaggc atggatatgt tatgaaatca gctggtaatt cctcctcatc 2700 acqtttctct cattttcttt tgttttccat tgcaagggga tggttgtttt ctttctgcct ttagtttgct tttgcccaag gcccttaaca tttggacact taaaataggg ttaatttca 2760 gggaaaaaga atgttggcgt gtgtaaagtc tctattagca atgaagggaa tttgttaacg 2820 2880 atqcatccac ttgattgatg acttattgca aatggcggtt ggctgaggaa aacccatgac 2940 acagcacaac tctacagaca gtgatgtgtc tcttgtttct actgctaaga aggtctgaaa 3000 atttaatgaa accacttcat acatttaagt attttgtttg gtttgaactc aatcagtagc ttttccttac atgtttaaaa ataattccaa tgacagatga gcagctcact tttccaaagt 3060 3097 accccaaaag gccaaattaa aaaaaaaaa aaaaaaa

<210> 3 <211> 737 <212> PRT

<213> Homo sapiens

<220> <221> misc_feature <223> Prox-1 Protein

<400> 3

Met Pro Asp His Asp Ser Thr Ala Leu Leu Ser Arg Gln Thr Lys Arg 1 10 15

Arg Arg Val Asp Ile Gly Val Lys Arg Thr Val Gly Thr Ala Ser Ala 20 25 30

Phe Phe Ala Lys Ala Arg Ala Thr Phe Phe Ser Ala Met Asn Pro Gln
35 40 45

Gly Ser Glu Gln Asp Val Glu Tyr Ser Val Val Gln His Ala Asp Gly 50 55 60

Glu Lys Ser Asn Val Leu Arg Lys Leu Leu Lys Arg Ala Asn Ser Tyr 65 70 75 80

Glu Asp Ala Met Met Pro Phe Pro Gly Ala Thr Ile Ile Ser Gln Leu 85 90 95

Leu Lys Asn Asn Met Asn Lys Asn Gly Gly Thr Glu Pro Ser Phe Gln 100 110

Ala Ser Gly Leu Ser Ser Thr Gly Ser Glu Val His Gln Glu Asp Ile 115 120 125

Cys Ser Asn Ser Ser Arg Asp Ser Pro Pro Glu Cys Leu Ser Pro Phe 130 135 140

Gly Arg Pro Thr Met Ser Gln Phe Asp Met Asp Arg Leu Cys Asp Glu

160

150 145 His Leu Arg Ala Lys Arg Ala Arg Val Glu Asn Ile Ile Arg Gly Met
165 170 175 Ser His Ser Pro Ser Val Ala Leu Arg Gly Asn Glu Asn Glu Arg Glu 180 185 190 Met Ala Pro Gln Ser Val Ser Pro Arg Glu Ser Tyr Arg Glu Asn Lys 195 · 200 205 Arg Lys Gln Lys Leu Pro Gln Gln Gln Gln Gln Ser Phe Gln Gln Leu 210 215 220 Val Ser Ala Arg Lys Glu Gln Lys Arg Glu Glu Arg Arg Gln Leu Lys 225 230 235 240 Gln Gln Leu Glu Asp Met Gln Lys Gln Leu Arg Gln Leu Gln Glu Lys 255 Phe Tyr Gln Ile Tyr Asp Ser Thr Asp Ser Glu Asp Glu Asp Gly 260 265 Asn Leu Ser Glu Asp Ser Met Arg Ser Glu Ile Leu Asp Ala Arg Ala 275 280 285 Gln Asp Ser Val Gly Arg Ser Asp Asn Glu Met Cys Glu Leu Asp Pro 290 295 300 Gly Gln Phe Ile Asp Arg Ala Arg Ala Leu Ile Arg Glu Gln Glu Met 305 310 315 320 Ala Glu Asn Lys Pro Lys Arg Glu Gly Asn Asn Lys Glu Arg Asp His 325 330 335 Gly Pro Asn Ser Leu Gln Pro Glu Gly Lys His Leu Ala Glu Thr Leu 340 345 350 Lys Gln Glu Leu Asn Thr Ala Met Ser Gln Val Val Asp Thr Val Val 355 360 365 Lys Val Phe Ser Ala Lys Pro Ser Arg Gln Val Pro Gln Val Phe Pro 370 375 380 Pro Leu Gln Ile Pro Gln Ala Arg Phe Ala Val Asn Gly Glu Asn His 385 390 395 400 Asn Phe His Thr Ala Asn Gln Arg Leu Gln Cys Phe Gly Asp Val Ile 405 410 415 Ile Pro Asn Pro Leu Asp Thr Phe Gly Asn Val Gln Met Ala Ser Ser

420

Thr Asp Gln Thr Glu Ala Leu Pro Leu Val Val Arg Lys Asn Ser Ser 435 440 445

Asp Gln Ser Ala Ser Gly Pro Ala Ala Gly Gly His His Gln Pro Leu 450 460

His Gln Ser Pro Leu Ser Ala Thr Thr Gly Phe Thr Thr Ser Thr Phe 465 470 475 480

Arg His Pro Phe Pro Leu Pro Leu Met Ala Tyr Pro Phe Gln Ser Pro 485 490 495

Leu Gly Ala Pro Ser Gly Ser Phe Ser Gly Lys Asp Arg Ala Ser Pro 500 505 510

Glu Ser Leu Asp Leu Thr Arg Asp Thr Thr Ser Leu Arg Thr Lys Met 515 520 525

Ser Ser His His Leu Ser His His Pro Cys Ser Pro Ala His Pro Pro 530 540

Ser Thr Ala Glu Gly Leu Ser Leu Ser Leu Ile Lys Ser Glu Cys Gly 545 550 555 560

Asp Leu Gln Asp Met Ser Glu Ile Ser Pro Tyr Ser Gly Ser Ala Met
565 570 575

Gln Glu Gly Leu Ser Pro Asn His Leu Lys Lys Ala Lys Leu Met Phe 580 585 590

Phe Tyr Thr Arg Tyr Pro Ser Ser Asn Met Leu Lys Thr Tyr Phe Ser 595 600 605

Asp Val Lys Phe Asn Arg Cys Ile Thr Ser Gln Leu Ile Lys Trp Phe 610 620

Ser Asn Phe Arg Glu Phe Tyr Tyr Ile Gln Met Glu Lys Tyr Ala Arg 625 630 635 640

Gln Ala Ile Asn Asp Gly Val Thr Ser Thr Glu Glu Leu Ser Ile Thr 645 650 655

Arg Asp Cys Glu Leu Tyr Arg Ala Leu Asn Met His Tyr Asn Lys Ala 660 670

Asn Asp Phe Glu Val Pro Glu Arg Phe Leu Glu Val Ala Gln Ile Thr 675 680 685

Leu Arg Glu Phe Phe Asn Ala Ile Ile Ala Gly Lys Asp Val Asp Pro

690

<220>

<221>

<400> 7

misc_feature

Prox-1 A25 antisense

695

39467A.txt.txt 700

Ser Trp Lys Lys Ala Ile Tyr Lys Val Ile Cys Lys Leu Asp Ser Glu 705 710 715 720 Val Pro Glu Ile Phe Lys Ser Pro Asn Cys Leu Gln Glu Leu Leu His
725 730 735 Glu . <210> 21 <211> <212> RNA · Homo sapiens <213> <220> <221> misc_feature <223> Prox-1 A16 sense <400> 4 21 cugcaagcug gauagugaag u 5 21 <210> <211> <212> RNA <213> Homo sapiens <220> <221> <223> misc_feature Prox-1 A16 antisense <400> 5 21 uucacuaucc agcuugcaga u <210> <211> 21 <212> RNA <213> Homo sapiens <220> <221> misc_feature Prox-1 A25 sense 21 cuaugagcca guuugauauu u <210> 21 <211> <212> RNA <213> Homo sapiens

21

21

<212> RNA <213> Homo sapiens <220>

<221> misc_feature <223> EGFP A18 sense <400> 8

gacguaaacg gccacaaguu u

<210> 9 <211> 21 <212> RNA

<213> Homo sapiens

<220> <221> misc_feature <223> EGFP A18 antisense <400> 9

acuuguggcc guuuacgucu u

<210> 10 <211> 3362 <212> DNA <213> Homo sapiens

<220> <221> misc_feature <223> Beta-catenin

<400> 60 aagcctctcg gtctgtggca gcagcgttgg cccggccccg ggagcggaga gcgaggggag 120 gcggagacgg aggaaggtct gaggagcagc ttcagtcccc gccgagccgc caccgcaggt 180 cqaqqacqqt cqqactcccq cqqcqqqaqq aqcctqttcc cctqaqqqta tttqaagtat accatacaac tottttgaaa atccagcgtg gacaatggct actcaagctg atttgatgga 240 300 gttggacatg gccatggaac cagacagaaa agcggctgtt agtcactggc agcaacagtc 360 ttacctggac tctggaatcc attctggtgc cactaccaca gctccttctc tgagtggtaa aggcaatcct gaggaagagg atgtggatac ctcccaagtc ctgtatgagt gggaacaggg 420 480 attttctcag tccttcactc aagaacaagt agctgatatt gatggacagt atgcaatgac 540 tcgagctcag agggtacgag ctgctatgtt ccctgagaca ttagatgagg gcatgcagat 600 cccatctaca cagtttgatg ctgctcatcc cactaatqtc cagcgtttgg ctgaaccate acagatgctg aaacatgcag ttgtaaactt gattaactat caagatgatg cagaacttgc 660 cacacgtgca atccctgaac tgacaaaact gctaaatgac gaggaccagg tggtggttaa 720 780 taaggctgca gttatggtcc atcagctttc taaaaaggaa gcttccagac acgctatcat

		.txt	39467A.txt			•
840	atgatgtaga			ctgctattgt	cagatggtgt	gcgttctcct
900	agggcttact	catcatcgtg	taacctttcc	ggaccttgca	tgtaccgctg	aacagctcgt
960	caccagtgga	atgcttggtt	cctggtgaaa	gcattcctgc	aagtctggag	ggccatcttt
1020	aagaaggagc	ttattacatc	ccacaacctt	ttacaactct	ttttatgcca	ttctgtgttg
1080	tcaacaaaac	gttgccttgc	gcagaaaatg	ctggtgggct	gtgcgtttag	taaaatggca
1140	atggcaacca	attttagctt	ctgccttcaa	ttacgacaga	ttcttggcta	aaatgttaaa
1200	atataatgag	gctttagtaa	tggaccccaa	tggctagtgg	ctcatcatac	agaaagcaag
1260	tgctatctgt	gtgctgaagg	cacaagcaga	tactgtggac	tacgaaaaac	gacctatact
1320	taggacttca	atgcaagctt	agctggtgga	ctattgtaga	aataagccgg	ctgctctagt
1380	ggaatctttc	tggactctca	gaactgtctt	gtcttgttca	ccaagtcaac	cctgacagat
1440	ttcagcttct	gggactcttg	aggtctcctt	aagggatgga	actaaacagg	agatgctgca
1500	acctcacttg	attctttcta	tgcagctgga	tggtcacctg	gatataaatg	gggttcagat
1560	ctcttgtgcg	ggtatagagg	ccaagtgggt	tgatggtctg	aagaacaaga	caataattat
1620	gtgctcttcg	cctgccatct	catcactgag	acagggaaga	cgggctggtg	tactgtcctt
1680	gccttcacta	aatgcagttc	gatggcccag	aagaagcaga	agccgacacc	tcatctgacc
1740	tgataaaggc	cactggcctc	cccaccatcc	agctcttaca	gttgtggtta	tggactacca
1800	ctttgcgtga	aatcatgcac	ttgtcccgca	atcttgccct	ttgattcgaa	tactgttgga
1860	atacccagcg.	gcacatcagg	gcttgttcgt	tagttcagtt	attccacgac	gcagggtgcc
1920	tggaagaaat	ggggtccgca	atttgtggag	cacagcagca	atgggtggga	ccgtacgtcc
1980	accgaattgt	gatgttcaca	cctagctcgg	cccttcacat	tgtaccggag	agttgaaggt
2040	ccattgaaaa	ctttattctc	tgtgcagctg	ttccattgtt	ctaaatacca	tatcagagga
2100	aagctgcaga	caggacaagg	tgaacttgct	gggtcctctg	gtagctgcag	catccaaaga
2160	ctaggaatga	ttacttcact	tctgacagag	ccacagctcc	gctgagggag	agctattgaa
2220	agccacaaga	tctgaggaca	gttccgaatg	ctgctgtttt	acatatgcag	aggtgtggcg
2280	agccaatggc	ttcagaacag	cagctctctc	ttgagctgac	cggctttcag	ttacaagaaa
2340	cccttggata	cagggagaac	tattggtgcc	ttggacttga	actgctgatc	ttggaatgag
2400	aggatgcctt	ggatatggcc	tcactctggt	atcgttcttt	gatcctagct	tcgccaggat
2460	ctgactatcc	caccctggtg	gggtggccac	aacatgagat	cccatgatgg	gggtatggac
2520	tgcctccagg	atggatgggc	ccaggacctc	tggggcatgc	ctgccagatc	agttgatggg
2580	agctgtattg	atcatccttt	tgacctgtaa	ggtttgatac	cagctggcct	tgacagcaat
2640	ggtgggctgg	gggctcgagg	gttgctgaga	ggcctgtaga	cattgtgatt	tctgaacttg
2700	caattgaagt	cctatgggaa	agctgagttt	acactaacca	agtgcctgac	tatctcagaa
2760	ttttgggagt	tacaaatgga	ggagtaacaa	ttttggtcga	ttctggtcct	aaactttttg
2820	caaaccctag	tggaatttag	gatcacaaga	cacaagaatg	gtgaagaatg	gactcaagaa

			39467A.txt	+v+		
ccttgcttgt	taaaattttt	ttttttttt			gtactgactt	2880
tgcttgcttt	gaagtagctc	ttttttttt	ttttttttt	tttttttgca	gtaactgttt	2940
tttaagtctc	tcgtagtgtt	aagttatagt	gaatactgct	acagcaattt	ctaattttta	3000
agaattgagt	aatggtgtag	aacactaatt	aattcataat	cactctaatt	aattgtaatc	3060
tgaataaagt	gtaacaattg	tgtagccttt	ttgtataaaa	tagacaaata	gaaaatggtc	3120
caattagttt	cctttttaat	atgcttaaaa	taagcaggtg	gatctatttc	atgtttttga	3180
tcaaaaacta	tttgggatat	gtatgggtag	ggtaaatcag	taagaggtgt	tatttggaac	3240
cttgttttgg	acagtttacc	agttgccttt	tatcccaaag	ttgttgtaac	ctgctgtgat	3300
acgatgcttc	aagagaaaat	gcggttataa	aaaatggttc	agaattaaac	ttttaattca	3360
tt						3362
				j		

<210> 11 <211> 781 <212> PRT

<213> Homo sapiens

<220> <221> misc_feature <223> Beta-catenin

<400> 11

Met Ala Thr Gln Ala Asp Leu Met Glu Leu Asp Met Ala Met Glu Pro 1 10 15

Asp Arg Lys Ala Ala Val Ser His Trp Gln Gln Gln Ser Tyr Leu Asp 20 25 30

Ser Gly Ile His Ser Gly Ala Thr Thr Ala Pro Ser Leu Ser Gly 35 40 45

Lys Gly Asn Pro Glu Glu Glu Asp Val Asp Thr Ser Gln Val Leu Tyr 50 55 60

Glu Trp Glu Gln Gly Phe Ser Gln Ser Phe Thr Gln Glu Gln Val Ala 65 70 75 80

Asp Ile Asp Gly Gln Tyr Ala Met Thr Arg Ala Gln Arg Val Arg Ala 85 90 95

Ala Met Phe Pro Glu Thr Leu Asp Glu Gly Met Gln Ile Pro Ser Thr 100 105 110

Gln Phe Asp Ala Ala His Pro Thr Asn Val Gln Arg Leu Ala Glu Pro 115 120 125

Ser Gln Met Leu Lys His Ala Val Val Asn Leu Ile Asn Tyr Gln Asp 130 135 140

Asp Ala Glu Leu Ala Thr Arg Ala Ile Pro Glu Leu Thr Lys Leu Leu 145 150 155 160 Asn Asp Glu Asp Gln Val Val Asn Lys Ala Ala Val Met Val His 165 170 175 Gln Leu Ser Lys Lys Glu Ala Ser Arg His Ala Ile Met Arg Ser Pro 180 185 190 Gln Met Val Ser Ala Ile Val Arg Thr Met Gln Asn Thr Asn Asp Val 195 200 205 Glu Thr Ala Arg Cys Thr Ala Gly Thr Leu His Asn Leu Ser His His 210 215 220 Arg Glu Gly Leu Leu Ala Ile Phe Lys Ser Gly Gly Ile Pro Ala Leu 225 230 235 240 Val Lys Met Leu Gly Ser Pro Val Asp Ser Val Leu Phe Tyr Ala Ile 245 250 255 Thr Thr Leu His Asn Leu Leu Leu His Gln Glu Gly Ala Lys Met Ala 260 265 270 Val Arg Leu Ala Gly Gly Leu Gln Lys Met Val Ala Leu Leu Asn Lys 275 280 285 Thr Asn Val Lys Phe Leu Ala Ile Thr Thr Asp Cys Leu Gln Ile Leu 290 295 300 Ala Tyr Gly Asn Gln Glu Ser Lys Leu Ile Ile Leu Ala Ser Gly Gly 305 310 315 320 Pro Gln Ala Leu Val Asn Ile Met Arg Thr Tyr Thr Tyr Glu Lys Leu 325 330 335 Leu Trp Thr Thr Ser Arg Val Leu Lys Val Leu Ser Val Cys Ser Ser 340 345 350 Asn Lys Pro Ala Ile Val Glu Ala Gly Gly Met Gln Ala Leu Gly Leu 355 360 365 His Leu Thr Asp Pro Ser Gln Arg Leu Val Gln Asn Cys Leu Trp Thr 370 375 380 Leu Arg Asn Leu Ser Asp Ala Ala Thr Lys Gln Glu Gly Met Glu Gly 385 390 395 400 Leu Leu Gly Thr Leu Val Gln Leu Leu Gly Ser Asp Asp Ile Asn Val 405 410 415

Val Thr Cys Ala Ala Gly Ile Leu Ser Asn Leu Thr Cys Asn Asn Tyr 420 425 430 Lys Asn Lys Met Met Val Cys Gln Val Gly Gly Ile Glu Ala Leu Val 435 440 445 Arg Thr Val Leu Arg Ala Gly Asp Arg Glu Asp Ile Thr Glu Pro Ala 450 460 Ile Cys Ala Leu Arg His Leu Thr Ser Arg His Gln Glu Ala Glu Met 465 470 475 480 Ala Gln Asn Ala Val Arg Leu His Tyr Gly Leu Pro Val Val Lys 485 490 495 Leu Leu His Pro Pro Ser His Trp Pro Leu Ile Lys Ala Thr Val Gly
500 505 510 Leu Ile Arg Asn Leu Ala Leu Cys Pro Ala Asn His Ala Pro Leu Arg 515 520 525 Glu Gln Gly Ala Ile Pro Arg Leu Val Gln Leu Leu Val Arg Ala His 530 540 Gln Asp Thr Gln Arg Arg Thr Ser Met Gly Gly Thr Gln Gln Gln Phe 545 550 555 560 Val Glu Gly Val Arg Met Glu Glu Ile Val Glu Gly Cys Thr Gly Ala 565 570 575 Leu His Ile Leu Ala Arg Asp Val His Asn Arg Ile Val Ile Arg Gly
580 585 590 Leu Asn Thr Ile Pro Leu Phe Val Gln Leu Leu Tyr Ser Pro Ile Glu 595 600 605 Asn Ile Gln Arg Val Ala Ala Gly Val Leu Cys Glu Leu Ala Gln Asp 610 615 620 Lys Glu Ala Ala Glu Ala Ile Glu Ala Glu Gly Ala Thr Ala Pro Leu 625 630 640 Thr Glu Leu Leu His Ser Arg Asn Glu Gly Val Ala Thr Tyr Ala Ala 645 650 655 Ala Val Leu Phe Arg Met Ser Glu Asp Lys Pro Gln Asp Tyr Lys Lys 660 665 670 Arg Leu Ser Val Glu Leu Thr Ser Ser Leu Phe Arg Thr Glu Pro Met

Ala Trp Asn Glu Thr Ala Asp Leu Gly Leu Asp Ile Gly Ala Gln Gly 690 700

Glu Pro Leu Gly Tyr Arg Gln Asp Asp Pro Ser Tyr Arg Ser Phe His 705 710 715 720

Ser Gly Gly Tyr Gly Gln Asp Ala Leu Gly Met Asp Pro Met Met Glu 725 730 735

His Glu Met Gly Gly His His Pro Gly Ala Asp Tyr Pro Val Asp Gly 740 745 75.0

Leu Pro Asp Leu Gly His Ala Gln Asp Leu Met Asp Gly Leu Pro Pro 755 760 765

Gly Asp Ser Asn Gln Leu Ala Trp Phe Asp Thr Asp Leu 770 780

<210> 12 <211> 2500

<212> DNA <213> Homo sapiens

<220>

<221> misc_feature

<223> TCF-4

<400> cggggggatc ttggctgtgt gtctgcggat ctgtagtggc ggcggcggcg gcggcggcgg 60 ggaggcagca ggcgcggag cgggcgcagg agcaggcggc ggcggtggcg gcggcggtta 120 gacatgaacg ccgcctcggc gccggcggtg cacggagagc cccttctcgc gcgcgggcgg 180 tttgtgtgat tttgctaaaa tgcatcacca acagcgaatg gctgccttag ggacggacaa 240 300 agagctgagt gatttactgg atttcagtgc gatgttttca cctcctgtga gcagtgggaa 360 aaatggacca acttctttgg caagtggaca ttttactggc tcaaatgtag aagacagaag 420 tagctcaggg tcctggggga atggaggaca tccaagcccg tccaggaact atggagatgg 480 gactccctat gaccacatga ccagcaggga ccttgggtca catgacaatc tctctccacc 540 ttttgtcaat tccagaatac aaagtaaaac agaaaggggc tcatactcat cttatgggag 600 agaatcaaac ttacagggtt gccaccagca gagtctcctt ggaggtgaca tggatatggg 660 caacccagga accctttcgc ccaccaaacc tggttcccag tactatcagt attctagcaa 720 taatccccga aggaggcctc ttcacagtag tgccatggag gtacagacaa agaaagttcg 780 aaaagttcct ccaggtttgc catcttcagt ctatgctcca tcagcaagca ctgccgacta caatagggac tcgccaggct atccttcctc caaaccagca accagcactt tccctagctc 840 900 cttcttcatg caagatggcc atcacagcag tgacccttgg agctcctcca gtgggatgaa tcagcctggc tatgcaggaa tgttgggcaa ctcttctcat attccacagt ccagcagcta 960

39467A.txt.txt ctgtagcctg catccacatg aacgtttgag ctatccatca cactcctcag cagacatcaa 1020 ttccagtctt cctccgatgt ccactttcca tcgtagtggt acaaaccatt acagcacctc 1080 ttcctgtacg cctcctgcca acgggacaga cagtataatg gcaaatagag gaagcggggc 1140 1200 agccggcagc tcccagactg gagatgctct ggggaaagca cttgcttcga tctattctcc agatcacact aacaacagct tttcatcaaa cccttcaact cctgttggct ctcctccatc 1260 tctctcagca ggcacagctg tttggtctag aaatggagga caggcctcat cgtctcctaa 1320 1380 ttatgaagga cccttacact ctttgcaaag ccgaattgaa gatcgtttag aaagactgga 1440 tgatgctatt catgttctcc ggaaccatgc agtgggccca tccacagcta tgcctggtgg 1500 tcatggggac atgcatggaa tcattggacc ttctcataat ggagccatgg gtggtctggg ctcagggtat ggaaccggcc ttctttcagc caacagacat tcactcatgg tggggaccca 1560 tcgtgaagat ggcgtggccc tgagaggcag ccattctctt ctgccaaacc aggttccggt 1620 tccacagett cetgtecagt etgegaette ecetgaeetg aacceaeece aggaeeetta 1680 cagaggcatg ccaccaggac tacaggggca gagtgtctcc tctggcagct ctgagatcaa 1740 atccgatgac gagggtgatg agaacctgca agacacgaaa tcttcggagg acaagaaatt 1800 agatgacgac aagaaggata tcaaatcaat tactagcaat aatgacgatg aggacctgac 1860 accagagcag aaggcagagc gtgagaagga gcggaggatg gccaacaatg cccgagagcg 1920 tctgcgggtc cgtgacatca acgaggcttt caaagagctc ggccgcatgg tgcagctcca 1980 cctcaagagt gacaagcccc agaccaagct cctgatcctc caccaggcgg tggccgtcat 2040 cctcagtctg gagcagcaag tccgagaaag gaatctgaat ccgaaagctg cgtgtctgaa 2100 aagaagggag gaagagaagg tgtcctcgga gcctcccct ctctccttgg ccggcccaca 2160 ccctggaatg ggagacgcat cgaatcacat gggacagatg taaaagggtc caagttgcca 2220 cattgcttca ttaaaacaag agaccacttc cttaacagct gtattatctt aaacccacat 2280 aaacacttct ccttaacccc catttttgta atataagaca agtctgagta gttatgaatc 2340 2400 gcagacgcaa gaggtttcag cattcccaat tatcaaaaaa cagaaaaaca aaaaaaagaa agaaaaaagt gcaacttgag ggacgacttt ctttaacata tcattcagaa tgtgcaaagc 2460 2500 agtatgtaca ggctgagaca cagcccagag actgaacggc

```
<210> 13
<211> 667
<212> PRT
```

<400> 13

Met His His Gln Gln Arg Met Ala Ala Leu Gly Thr Asp Lys Glu Leu 1 10 15

3. S. J. S. J.

<213> Homo sapiens

<220> <221> misc_feature <223> TCF-4

Ser Asp Leu Leu Asp Phe Ser Ala Met Phe Ser Pro Pro Val Ser Ser 20 25 30 Gly Lys Asn Gly Pro Thr Ser Leu Ala Ser Gly His Phe Thr Gly Ser 35 40 45 Asn Val Glu Asp Arg Ser Ser Ser Gly Ser Trp Gly Asn Gly Gly His 50 55 60 Pro Ser Pro Ser Arg Asn Tyr Gly Asp Gly Thr Pro Tyr Asp His Met 65 70 75 80 Thr Ser Arg Asp Leu Gly Ser His Asp Asn Leu Ser Pro Pro Phe Val Asn Ser Arg Ile Gln Ser Lys Thr Glu Arg Gly Ser Tyr Ser Ser Tyr 100 105 110 Gly Arg Glu Ser Asn Leu Gln Gly Cys His Gln Gln Ser Leu Leu Gly
115 120 125 Gly Asp Met Asp Met Gly Asn Pro Gly Thr Leu Ser Pro Thr Lys Pro 130 135 140 Gly Ser Gln Tyr Tyr Gln Tyr Ser Ser Asn Asn Pro Arg Arg Pro 145 150 155 160 Leu His Ser Ser Ala Met Glu Val Gln Thr Lys Lys Val Arg Lys Val 165 170 175 Pro Pro Gly Leu Pro Ser Ser Val Tyr Ala Pro Ser Ala Ser Thr Ala 180 185 190 Asp Tyr Asn Arg Asp Ser Pro Gly Tyr Pro Ser Ser Lys Pro Ala Thr 195 200 205 Ser Thr Phe Pro Ser Ser Phe Phe Met Gln Asp Gly His His Ser Ser 210 215 220 Asp Pro Trp Ser Ser Ser Gly Met Asn Gln Pro Gly Tyr Ala Gly 225 230 235 240 Met Leu Gly Asn Ser Ser His Ile Pro Gln Ser Ser Ser Tyr Cys Ser 245 250 255 Leu His Pro His Glu Arg Leu Ser Tyr Pro Ser His Ser Ser Ala Asp 260 265 270 Ile Asn Ser Ser Leu Pro Pro Met Ser Thr Phe His Arg Ser Gly Thr 275 280 285

Asn His Tyr Ser Thr Ser Ser Cys Thr Pro Pro Ala Asn Gly Thr Asp 290 295 300 Ser Ile Met Ala Asn Arg Gly Ser Gly Ala Ala Gly Ser Ser Gln Thr 305 310 315 Gly Asp Ala Leu Gly Lys Ala Leu Ala Ser Ile Tyr Ser Pro Asp His 325 330 335 Thr Asn Asn Ser Phe Ser Ser Asn Pro Ser Thr Pro Val Gly Ser Pro 340 345 350 Pro Ser Leu Ser Ala Gly Thr Ala Val Trp Ser Arg Asn Gly Gly Gln 355 360 365 Ala Ser Ser Ser Pro Asn Tyr Glu Gly Pro Leu His Ser Leu Gln Ser 370 375 380 Arg Ile Glu Asp Arg Leu Glu Arg Leu Asp Asp Ala Ile His Val Leu 385 390 395 400 Arg Asn His Ala Val Gly Pro Ser Thr Ala Met Pro Gly Gly His Gly
405 410 415 Asp Met His Gly Ile Ile Gly Pro Ser His Asn Gly Ala Met Gly Gly 420 425 430 Leu Gly Ser Gly Tyr Gly Thr Gly Leu Leu Ser Ala Asn Arg His Ser 445 445 Leu Met Val Gly Thr His Arg Glu Asp Gly Val Ala Leu Arg Gly Ser 450 455 460 His Ser Leu Leu Pro Asn Gln Val Pro Val Pro Gln Leu Pro Val Gln 465 470 475 480 Ser Ala Thr Ser Pro Asp Leu Asn Pro Pro Gln Asp Pro Tyr Arg Gly 485 490 495 Met Pro Pro Gly Leu Gln Gly Gln Ser Val Ser Ser Gly Ser Ser Glu 500 505 510 Ile Lys Ser Asp Asp Glu Gly Asp Glu Asn Leu Gln Asp Thr Lys Ser 515 520 525 Ser Glu Asp Lys Lys Leu Asp Asp Asp Lys Lys Asp Ile Lys Ser Ile 530 540 Thr Ser Asn Asn Asp Asp Glu Asp Leu Thr Pro Glu Gln Lys Ala Glu 545 550 555 560

Arg Glu Lys Glu Arg Arg Met Ala Asn Asn Ala Arg Glu Arg Leu Arg 565 570 575

Val Arg Asp Ile Asn Glu Ala Phe Lys Glu Leu Gly Arg Met Val Gln 580 585 590

Leu His Leu Lys Ser Asp Lys Pro Gln Thr Lys Leu Leu Ile Leu His 595 600 605

Gln Ala Val Ala Val Ile Leu Ser Leu Glu Gln Gln Val Arg Glu Arg 610 615 620

Asn Leu Asn Pro Lys Ala Ala Cys Leu Lys Arg Arg Glu Glu Lys 625 630 635 640

Val Ser Ser Glu Pro Pro Pro Leu Ser Leu Ala Gly Pro His Pro Gly 645 650 655

Met Gly Asp Ala Ser Asn His Met Gly Gln Met 660 665

<210> 14

<211> 9312

<212> DNA

<213> Homo sapiens

<220>

<400>

<221> misc_feature

<223> Notch-1

60 atgccgccgc tcctggcgcc cctgctctgc ctggcgctgc tgcccgcgct cgccgcacga ggcccgcgat gctcccagcc cggtgagacc tgcctgaatg gcgggaagtg tgaagcggcc 120 aatggcacgg aggcctgcgt ctgtggcggg gccttcgtgg gcccgcgatg ccaggacccc 180 aacccgtgcc tcagcacccc ctgcaagaac gccgggacat gccacgtggt ggaccgcaga 240 300 ggcgtggcag actatgcctg cagctgtgcc ctgggcttct ctgggcccct ctgcctgaca 360 cccctggaca atgcctgcct caccaacccc tgccgcaacg ggggcacctg cgacctgctc acgctgacgg agtacaagtg ccgctgcccg cccggctggt cagggaaatc gtgccagcag 420 480 gctgacccgt gcgcctccaa cccctgcgcc aacggtggcc agtgcctgcc cttcgaggcc 540 tcctacatct qccactqccc acccagcttc catggcccca cctgccggca ggatgtcaac gagtgtggcc agaagcccgg gctttgccgc cacggaggca cctgccacaa cgaggtcggc 600 660 tcctaccqct qcqtctgccg cgccacccac actggcccca actgcgagcg gccctacgtg ccctgcagcc cctcgccctg ccagaacggg ggcacctgcc gccccacggg cgacgtcacc 720 780 cacqaqtqtq cctqcctqcc aggcttcacc ggccagaact gtgaggaaaa tatcgacgat tgtccaggaa acaactgcaa gaacgggggt gcctgtgtgg acggcgtgaa cacctacaac 840

39467A.txt.txt 900 tgccgctgcc cgccagagtg gacaggtcag tactgtaccg aggatgtgga cgagtgccag 960 ctgatgccaa atgcctgcca gaacggcggg acctgccaca acacccacgg tggctacaac 1020 tgcgtgtgtg tcaacggctg gactggtgag gactgcagcg agaacattga tgactgtgcc 1080 agcgccgcct gcttccacgg cgccacctgc catgaccgtg tggcctcctt ctactgcgag 1140 tgtccccatg gccgcacagg tctgctgtgc cacctcaacg acgcatgcat cagcaacccc 1200 tgtaacgagg gctccaactg cgacaccaac cctgtcaatg gcaaggccat ctgcacctgc 1260 ccctcggggt acacgggccc ggcctgcagc caggacgtgg atgagtgctc gctgggtgcc aacccctgcg agcatgcggg caagtgcatc aacacgctgg gctccttcga gtgccagtgt 1320 1380 ctgcagggct acacgggccc ccgatgcgag atcgacgtca acgagtgcgt ctcgaacccg 1440 tqccagaacg acgccacctg cctggaccag attggggagt tccagtgcat ctgcatgccc 1500 qqctacgagg gtgtgcactg cgaggtcaac acagacgagt gtgccagcag cccctgcctg 1560 cacaatggcc gctgcctgga caagatcaat gagttccagt gcgagtgccc cacgggcttc 1620 actgggcatc tgtgccagta cgatgtggac gagtgtgcca gcaccccctg caagaatggt 1680 gccaagtgcc tggacggacc caacacttac acctgtgtgt gcacggaagg gtacacgggg 1740 acgcactgcg aggtggacat cgatgagtgc gaccccgacc cctgccacta cggctcctgc 1800 aaggacggcg tcgccacctt cacctgcctc tgccgcccag gctacacggg ccaccactgc gagaccaaca tcaacgagtg ctccagccag ccctgccgcc acgggggcac ctgccaggac 1860 cgcgacaacg cctacctctg cttctgcctg aaggggacca caggacccaa ctgcgagatc 1920 aacctggatg actgtgccag cagcccctgc gactcgggca cctgtctgga caagatcgat 1980 2040 ggctacgagt gtgcctgtga gccgggctac acagggagca tgtgtaacat caacatcgat gagtgtgcgg gcaacccctg ccacaacggg ggcacctgcg aggacggcat caatggcttc 2100 2160 acctgccgct gccccgaggg ctaccacgac cccacctgcc tgtctgaggt caatgagtgc 2220 aacagcaacc cctgcgtcca cggggcctgc cgggacagcc tcaacgggta caagtgcgac 2280 tgtgaccctg ggtggagtgg gaccaactgt gacatcaaca acaatgagtg tgaatccaac ccttgtgtca acggcggcac ctgcaaagac atgaccagtg gctacgtgtg cacctgccgg 2340 gagggcttca gcggtcccaa ctgccagacc aacatcaacg agtgtgcgtc caacccatgt 2400 2460 ctgaaccagg gcacgtgtat tgacgacgtt gccgggtaca agtgcaactg cctgctgccc 2520 tacacaggtg ccacgtgtga ggtggtgctg gccccgtgtg cccccagccc ctgcagaaac ggcggggagt gcaggcaatc cgaggactat gagagcttct cctgtgtctg ccccacgggc 2580 tggcaagcag ggcagacctg tgaggtcgac atcaacgagt gcgttctgag cccgtgccgg 2640 2700 cacggcgcat cctgccagaa cacccacggc ggctaccgct gccactgcca ggccggctac 2760 agtgggcgca actgcgagac cgacatcgac gactgccggc ccaacccgtg tcacaacggg ggctcctgca cagacggcat caacacggcc ttctgcgact gcctgcccgg cttccggggc 2820 actttctgtg aggaggacat caacgagtgt gccagtgacc cctgccgcaa cggggccaac 2880

39467A.txt.txt 2940 tgcacggact gcgtggacag ctacacgtgc acctgccccg caggcttcag cgggatccac tgtgagaaca acacgcctga ctgcacagag agctcctgct tcaacggtgg cacctgcgtg 3000 qacggcatca actcgttcac ctgcctgtgt ccacccggct tcacgggcag ctactgccag 3060 3120 cacgatgtca atgagtgcga ctcacagccc tgcctgcatg gcggcacctg tcaggacggc tgcggctcct acaggtgcac ctgcccccag ggctacactg gccccaactg ccagaacctt 3180 gtgcactggt gtgactcctc gccctgcaag aacggcggca aatgctggca gacccacacc 3240 cagtaccgct gcgagtgccc cagcggctgg accggccttt actgcgacgt gcccagcgtg 3300 tcctgtgagg tggctgcgca gcgacaaggt gttgacgttg cccgcctgtg ccagcatgga 3360 qqqctctgtq tqqacgcggg caacacgcac cactgccgct gccaggcggg ctacacaggc 3420 agctactgtg aggacctggt ggacgagtgc tcacccagcc cctgccagaa cggggccacc 3480 tgcacggact acctgggcgg ctactcctgc aagtgcgtgg ccggctacca cggggtgaac 3540 tgctctgagg agatcgacga gtgcctctcc cacccctgcc agaacggggg cacctgcctc 3600 gacctcccca acacctacaa gtgctcctgc ccacggggca ctcagggtgt gcactgtgag 3660 atcaacgtgg acgactgcaa tcccccgtt gaccccgtgt cccggagccc caagtgcttt 3720 aacaacggca cctgcgtgga ccaggtgggc ggctacagct gcacctgccc gccgggcttc 3780 3840 gtgggtgagc gctgtgaggg ggatgtcaac gagtgcctgt ccaatccctg cgacgcccgt 3900 ggcacccaga actgcgtgca gcgcgtcaat gacttccact gcgagtgccg tgctggtcac accgggcgcc gctgcgagtc cgtcatcaat ggctgcaaag gcaagccctg caagaatggg 3960 4020 ggcacctgcg ccgtggcctc caacaccgcc cgcgggttca tctgcaagtg ccctgcgggc ttcgagggcg ccacgtgtga gaatgacgct cgtacctgcg gcagcctgcg ctgcctcaac 4080 4140 ggcggcacat gcatctccgg cccgcgcagc cccacctgcc tgtgcctggg ccccttcacg ggccccgaat gccagttccc ggccagcagc ccctgcctgg gcggcaaccc ctgctacaac 4200 caggggacct gtgagcccac atccgagagc cccttctacc gttgcctgtg ccccgccaaa 4260 ttcaacgggc tcttgtgcca catcctggac tacagcttcg ggggtggggc cgggcgcgac 4320 atcccccgc cgctgatcga ggaggcgtgc gagctgcccg agtgccagga ggacgcgggc 4380 aacaaggtct gcagcctgca gtgcaacaac cacgcgtgcg gctgggacgg cggtgactgc 4440 tccctcaact tcaatgaccc ctggaagaac tgcacgcagt ctctgcagtg ctggaagtac 4500 ttcagtgacg gccactgtga cagccagtgc aactcagccg gctgcctctt cgacggcttt 4560 4620 gactgccagc gtgcggaagg ccagtgcaac cccctgtacg accagtactg caaggaccac ttcagcgacg ggcactgcga ccagggctgc aacagcgcgg agtgcgagtg ggacgggctg 4680 gactgtgcgg agcatgtacc cgagaggctg gcggccggca cgctggtggt ggtggtgctg 4740 atgccgccgg agcagctgcg caacagctcc ttccacttcc tgcgggagct cagccgcgtg 4800 ctgcacacca acgtggtctt caagcgtgac gcacacggcc agcagatgat cttcccctac 4860 tacggccgcg aggaggagct gcgcaagcac cccatcaagc gtgccgccga gggctgggcc 4920

			39467A.txt			
gcacctgacg	ccctgctggg	ccaggtgaag	gcctcgctgc	tccctggtgg	cagcgagggt	4980
gggcggcggc	ggagggagct	ggaccccatg	gacgtccgcg	gctccatcgt	ctacctggag	5040
attgacaaco	ggcagtgtgt	gcaggcctcc	tcgcagtgct	tccagagtgc	caccgacgtg	5100
gccgcattcc	tgggagcgct	cgcctcgctg	ggcagcctca	acatccccta	caagatcgag	5160
gccgtgcaga	gtgagaccgt	ggagccgccc	ccgccggcgc	agctgcactt	catgtacgtg	5220
gcggcggccg	cctttgtgct	tctgttcttc	gtgggctgcg	gggtgctgct	gtcccgcaag	5280
cgccggcggc	agcatggcca	gctctggttc	cctgagggct	tcaaagtgtc	tgaggccagc	5340
aagaagaagc	ggcgggagcc	cctcggcgag	gactccgtgg	gcctcaagcc	cctgaagaac	5400
gcttcagacg	gtgccctcat	ggacgacaac	cagaatgagt	ggggggacga	ggacctggag	5460
accaagaagt	tccggttcga	ggagcccgtg	gttctgcctg	acctggacga	ccagacagac	5520
caccggcagt	ggactcagca	gcacctggat	gccgctgacc	tgcgcatgtc	tgccatggcc	5580
cccacaccgc	cccagggtga	ggttgacgcc	gactgcatgg	acgtcaatgt	ccgcgggcct	5640
gatggcttca	ccccgctcat	gatcgcctcc	tgcagcgggg	gcggcctgga	gacgggcaac	5700
agcgaggaag	aggaggacgc	gccggccgtc	atctccgact	tcatctacca	gggcgccagc	5760
ctgcacaacc	agacagaccg	cacgggcgag	accgccttgc	acctggccgc	ccgctactca	5820
cgctctgatg	ccgccaagcg	cctgctggag	gccagcgcag	atgccaacat	ccaggacaac	5880
atgggccgca	ccccgctgca	tgcggctgtg	tctgccgacg	cacaaggtgt	cttccagatc	5940
ctgatccgga	accgagccac	agacctggat	gcccgcatgc	atgatggcac	gacgccactg	6000
atcctggctg	cccgcctggc	cgtggagggc	atgctggagg	acctcatcaa	ctcacacgcc	6060
gacgtcaacg	ccgtagatga	cctgggcaag	tccgccctgc	actgggccgc	cgccgtgaac	6120
aatgtggatg	ccgcagttgt	gctcctgaag	aacggggcta	acaaagatat	gcagaacaac	6180
agggaggaga	cacccctgtt	tctggccgcc	cgggagggca	gctacgagac	cgccaaggtg	6240
ctgctggacc	actttgccaa	ccgggacatc	acggatcata	tggaccgcct	gccgcgcgac	6300
atcgcacagg	agcgcatgca	tcacgacatc	gtgaggctgc	tggacgagta	caacctggtg	6360
cgcagcccgc	agctgcacgg	agccccgctg	gggggcacgc	ccaccctgtc	gccccgctc	6420
tgctcgccca	acggctacct	gggcagcctc	aagcccggcg	tgcagggcaa	gaaggtccgc	6480
aagcccagca	gcaaaggcct	ggcctgtgga	agcaaggagg	ccaaggacct	caaggcacgg	6540
aggaagaagt	cccaggacgg	caagggctgc	ctgctggaca	gctccggcat	gctctcgccc	6600
gtggactccc	tggagtcacc	ccatggctac	ctgtcagacg	tggcctcgcc	gccactgctg	6660
ccctccccgt	tccagcagtc	tccgtccgtg	ccctcaacc	acctgcctgg	gatgcccgac	6720
acccacctgg	gcatcgggca	cctgaacgtg	gcggccaagc	ccgagatggc	ggcgctgggt	6780
		tgagactggc				6840
					cactgtgggc	6900
		tcaatgcgag				6960

39467A.txt.txt ccgaaccaat acaaccctct gcgggggagt gtggcaccag gccccctgag cacacaggcc 7020 7080 ccctccctgc agcatggcat ggtaggcccg ctgcacagta gccttgctgc cagcgccctg 7140 tcccagatga tgagctacca gggcctgccc agcacccggc tggccaccca gcctcacctg 7200 gtgcagaccc agcaggtgca gccacaaaac ttacagatgc agcagcagaa cctgcagcca 7260 gcaaacatcc agcagcagca aagcctgcag ccgccaccac caccaccaca gccgcacctt ggcgtgagct cagcagccag cggccacctg ggccggagct tcctgagtgg agagccgagc 7320 caggcagacg tgcagccact gggccccagc agcctggcgg tgcacactat tctgccccag 7380 7440 gagagccccg ccctgcccac gtcgctgcca tcctcgctgg tcccacccgt gaccgcagcc cagttcctga cgccccctc gcagcacagc tactcctcgc ctgtggacaa cacccccagc 7500 75.60 caccagctac aggtgcctga gcaccccttc ctcaccccgt cccctgagtc ccctgaccag 7620 tggtccagct cgtccccgca ttccaacgtc tccgactggt ccgagggcgt ctccagccct 7680 cccaccagca tgcagtccca gatcgcccgc attccggagg ccttcaagta aacggcgcgc cccacgagac cccggcttcc tttcccaagc cttcgggcgt ctgtgtgcgc tctgtggatg 7740 ccagggccga ccagaggagc ctttttaaaa cacatgtttt tatacaaaat aagaacgagg 7800 7860 attttaattt tttttagtat ttatttatgt acttttattt tacacagaaa cactgccttt 7920 ttatttatat gtactgtttt atctggcccc aggtagaaac ttttatctat tctgagaaaa caagcaagtt ctgagagcca gggttttcct acgtaggatg aaaagattct tctgtgttta 7980 taaaatataa acaaagattc atgatttata aatgccattt atttattgat tccttttttc 8040 aaaatccaaa aagaaatgat gttggagaag ggaagttgaa cgagcatagt ccaaaaagct 8100 cctggggcgt ccaggccgcg ccctttcccc gacgcccacc caaccccaag ccagcccggc 8160 cgctccacca gcatcacctg cctgttagga gaagctgcat ccagaggcaa acggaggcaa 8220 agctggctca ccttccgcac gcggattaat ttgcatctga aataggaaac aagtgaaagc 8280 atatgggtta gatgttgcca tgtgttttag atggtttctt gcaagcatgc ttgtgaaaat 8340 gtgttctcgg agtgtgtatg ccaagagtgc acccatggta ccaatcatga atctttgttt 8400 8460 caqqttcaqt attatgtagt tgttcgttgg ttatacaagt tcttggtccc tccagaacca ccccggcccc ctgcccgttc ttgaaatgta ggcatcatgc atgtcaaaca tgagatgtgt 8520 ggactgtggc acttgcctgg gtcacacacg gaggcatcct acccttttct ggggaaagac 8580 actgcctggg ctgaccccgg tggcggcccc agcacctcag cctgcacagt gtcccccagg 8640 ttccgaagaa gatgctccag caacacagcc tgggccccag ctcgcgggac ccgaccccc 8700 gtgggctccc gtgttttgta ggagacttgc cagagccggg cacattgagc tgtgcaacgc 8760 cgtgggctgc gtcctttggt cctgtccccg cagccctggc agggggcatg cggtcgggca 8820 ggggctggag ggaggcgggg gctgcccttg ggccacccct cctagtttgg gaggagcaga 8880 8940 tttttgcaat accaagtata gcctatggca gaaaaaatgt ctgtaaatat gtttttaaag gtggattttg tttaaaaaat cttaatgaat gagtctgttg tgtgtcatgc cagtgaggga 9000

cgtcagactt	ggctcagctc	ggggagcctt	39467A.txt agccgcccat	.txt gcactgggga	cgctccgctg	9060
ccgtgccgcc	tgcactcctc	agggcagcct	ccccggctc	tacgggggcc	gcgtggtgcc	9120
atccccaggg	ggcatgacca	gatgcgtccc	aagatgttga	tttttactgt	gttttataaa	9180
atagagtgta	gtttacagaa	aaagacttta	aaagtgatct	acatgaggaa	ctgtagatga	9240
tgtattttt	tcatctttt	tgttaactga	tttgcaataa	aaatgatact	gatggtgaaa	9300
aaaaaaaaa	aa					9312

<210> 15 <211> 2556 <212> PRT

<220>

<221> misc_feature

<223> Notch-1

<400> 15

Met Pro Pro Leu Leu Ala Pro Leu Leu Cys Leu Ala Leu Leu Pro Ala 10 15

Leu Ala Ala Arg Gly Pro Arg Cys Ser Gln Pro Gly Glu Thr Cys Leu 20 25 30

Asn Gly Gly Lys Cys Glu Ala Ala Asn Gly Thr Glu Ala Cys Val Cys 35 40 45

Gly Gly Ala Phe Val Gly Pro Arg Cys Gln Asp Pro Asn Pro Cys Leu 50 60

Ser Thr Pro Cys Lys Asn Ala Gly Thr Cys His Val Val Asp Arg Arg 65 70 75 80

Gly Val Ala Asp Tyr Ala Cys Ser Cys Ala Leu Gly Phe Ser Gly Pro 85 90 95

Leu Cys Leu Thr Pro Leu Asp Asn Ala Cys Leu Thr Asn Pro Cys Arg $100 \hspace{1cm} 105 \hspace{1cm} 110$

Asn Gly Gly Thr Cys Asp Leu Leu Thr Leu Thr Glu Tyr Lys Cys Arg 115 120 125

Cys Pro Pro Gly Trp Ser Gly Lys Ser Cys Gln Gln Ala Asp Pro Cys 130 140

Ala Ser Asn Pro Cys Ala Asn Gly Gly Gln Cys Leu Pro Phe Glu Ala 145 150 155 160

Ser Tyr Ile Cys His Cys Pro Pro Ser Phe His Gly Pro Thr Cys Arg 165 170 175

<213> Homo sapiens

Gln Asp Val Asm Glu Cys Gly Gln Lys Pro Gly Leu Cys Arg His Gly 180 185 - 190 Gly Thr Cys His Asn Glu Val Gly Ser Tyr Arg Cys Val Cys Arg Ala 195 200 205 Thr His Thr Gly Pro Asn Cys Glu Arg Pro Tyr Val Pro Cys Ser Pro 210 215 220 Ser Pro Cys Gln Asn Gly Gly Thr Cys Arg Pro Thr Gly Asp Val Thr 225 230 235 240 His Glu Cys Ala Cys Leu Pro Gly Phe Thr Gly Gln Asn Cys Glu Glu 245 250 255 Asn Ile Asp Asp Cys Pro Gly Asn Asn Cys Lys Asn Gly Gly Ala Cys 260 265 270 Val Asp Gly Val Asn Thr Tyr Asn Cys Arg Cys Pro Pro Glu Trp Thr 275 280 285 Gly Gln Tyr Cys Thr Glu Asp Val Asp Glu Cys Gln Leu Met Pro Asn 290 295 300 Ala Cys Gln Asn Gly Gly Thr Cys His Asn Thr His Gly Gly Tyr Asn 305 310 315 320 Cys Val Cys Val Asn Gly Trp Thr Gly Glu Asp Cys Ser Glu Asn Ile 325 330 335 Asp Asp Cys Ala Ser Ala Ala Cys Phe His Gly Ala Thr Cys His Asp 340 345 350 Arg Val Ala Ser Phe Tyr Cys Glu Cys Pro His Gly Arg Thr Gly Leu 355 360 365 Leu Cys His Leu Asn Asp Ala Cys Ile Ser Asn Pro Cys Asn Glu Gly 370 380 Ser Asn Cys Asp Thr Asn Pro Val Asn Gly Lys Ala Ile Cys Thr Cys 385 390 395 400 Pro Ser Gly Tyr Thr Gly Pro Ala Cys Ser Gln Asp Val Asp Glu Cys 405 410 415 Ser Leu Gly Ala Asn Pro Cys Glu His Ala Gly Lys Cys Ile Asn Thr 420 425 430 Leu Gly Ser Phe Glu Cys Gln Cys Leu Gln Gly Tyr Thr Gly Pro Arg 435 440 445

Cys Glu Ile Asp Val Asn Glu Cys Val Ser Asn Pro Cys Gln Asn Asp 450 455 460 Ala Thr Cys Leu Asp Gln Ile Gly Glu Phe Gln Cys Ile Cys Met Pro 465 470 475 480 Gly Tyr Glu Gly Val His Cys Glu Val Asn Thr Asp Glu Cys Ala Ser 485 490 495 Ser Pro Cys Leu His Asn Gly Arg Cys Leu Asp Lys Ile Asn Glu Phe 500 505 510 Gln Cys Glu Cys Pro Thr Gly Phe Thr Gly His Leu Cys Gln Tyr Asp 515 520 525 Val Asp Glu Cys Ala Ser Thr Pro Cys Lys Asn Gly Ala Lys Cys Leu 530 535 540 Asp Gly Pro Asn Thr Tyr Thr Cys Val Cys Thr Glu Gly Tyr Thr Gly 545 550 555 560 Thr His Cys Glu Val Asp Ile Asp Glu Cys Asp Pro Asp Pro Cys His 565 570 575 Tyr Gly Ser Cys Lys Asp Gly Val Ala Thr Phe Thr Cys Leu Cys Arg
580 585 590 Pro Gly Tyr Thr Gly His His Cys Glu Thr Asn Ile Asn Glu Cys Ser 595 600 605 Ser Gln Pro Cys Arg His Gly Gly Thr Cys Gln Asp Arg Asp Asn Ala 610 620 Tyr Leu Cys Phe Cys Leu Lys Gly Thr Thr Gly Pro Asn Cys Glu Ile 625 630 635 640 Asn Leu Asp Asp Cys Ala Ser Ser Pro Cys Asp Ser Gly Thr Cys Leu 645 650 655 Asp Lys Ile Asp Gly Tyr Glu Cys Ala Cys Glu Pro Gly Tyr Thr Gly 660 665 670 Ser Met Cys Asn Ile Asn Ile Asp Glu Cys Ala Gly Asn Pro Cys His 675 680 685 Asn Gly Gly Thr Cys Glu Asp Gly Ile Asn Gly Phe Thr Cys Arg Cys 690 700 Pro Glu Gly Tyr His Asp Pro Thr Cys Leu Ser Glu Val Asn Glu Cys 705 710 715 720

Asn Ser Asn Pro Cys Val His Gly Ala Cys Arg Asp Ser Leu Asn Gly 725 730 735 Tyr Lys Cys Asp Cys Asp Pro Gly Trp Ser Gly Thr Asn Cys Asp Ile 740 745 750 Asn Asn Glu Cys Glu Ser Asn Pro Cys Val Asn Gly Gly Thr Cys 755 760 765 Lys Asp Met Thr Ser Gly Tyr Val Cys Thr Cys Arg Glu Gly Phe Ser Gly Pro-Asn Cys Gln Thr Asn Ile Asn Glu-Cys Ala-Ser Asn Pro Cys 785 790 795 800 Leu Asn Gln Gly Thr Cys Ile Asp Asp Val Ala Gly Tyr Lys Cys Asn 805 810 815 Cys Leu Leu Pro Tyr Thr Gly Ala Thr Cys Glu Val Val Leu Ala Pro 820 825 830 Cys Ala Pro Ser Pro Cys Arg Asn Gly Gly Glu Cys Arg Gln Ser Glu 835 840 845 Asp Tyr Glu Ser Phe Ser Cys Val Cys Pro Thr Gly Trp Gln Ala Gly 850 860 Gln Thr Cys Glu Val Asp Ile Asn Glu Cys Val Leu Ser Pro Cys Arg 865 870 875 880 His Gly Ala Ser Cys Gln Asn Thr His Gly Gly Tyr Arg Cys His Cys 885 890 895 Gln Ala Gly Tyr Ser Gly Arg Asn Cys Glu Thr Asp Ile Asp Asp Cys 900 905 910 Arg Pro Asn Pro Cys His Asn Gly Gly Ser Cys Thr Asp Gly Ile Asn 915 920 925 Thr Ala Phe Cys Asp Cys Leu Pro Gly Phe Arg Gly Thr Phe Cys Glu 930 935 940 Glu Asp Ile Asn Glu Cys Ala Ser Asp Pro Cys Arg Asn Gly Ala Asn 945 950 955 960 Cys Thr Asp Cys Val Asp Ser Tyr Thr Cys Thr Cys Pro Ala Gly Phe 965 970 975 Ser Gly Ile His Cys Glu Asn Asn Thr Pro Asp Cys Thr Glu Ser Ser 980 985 990

. 39467A.txt.txt

Cys Phe Asn Gly Gly Thr Cys Val Asp Gly Ile Asn Ser Phe Thr Cys 995 1000 1005

Leu Cys Pro Pro Gly Phe Thr Gly Ser Tyr Cys Gln His Asp Val 1010 1015 1020

Asn Glu Cys Asp Ser Gln Pro Cys Leu His Gly Gly Thr Cys Gln 1025 1030 1035

Asp Gly Cys Gly Ser Tyr Arg Cys Thr Cys Pro Gln Gly Tyr Thr 1040 1045 1050

Gly Pro Asn Cys Gln Asn Leu Val His Trp Cys Asp Ser Ser Pro 1055 1060 1065

Cys Lys Asn Gly Gly Lys Cys Trp Gln Thr His Thr Gln Tyr Arg 1070 1075 1080

Cys Glu Cys Pro Ser Gly Trp Thr Gly Leu Tyr Cys Asp Val Pro 1085 1090 1095

Ser Val Ser Cys Glu Val Ala Ala Gln Arg Gln Gly Val Asp Val 1100 1110

Ala Arg Leu Cys Gln His Gly Gly Leu Cys Val Asp Ala Gly Asn 1115 1120 1125

Thr His His Cys Arg Cys Gln Ala Gly Tyr Thr Gly Ser Tyr Cys 1130 1135 1140

Glu Asp Leu Val Asp Glu Cys Ser Pro Ser Pro Cys Gln Asn Gly 1145 1150 1155

Ala Thr Cys Thr Asp Tyr Leu Gly Gly Tyr Ser Cys Lys Cys Val 1160 1165 1170

Ala Gly Tyr His Gly Val Asn Cys Ser Glu Glu Ile Asp Glu Cys 1175 1180 1185

Leu Ser His Pro Cys Gln Asn Gly Gly Thr Cys Leu Asp Leu Pro 1190 1195 1200

Asn Thr Tyr Lys Cys Ser Cys Pro Arg Gly Thr Gln Gly Val His 1205 1210 1215

Cys Glu Ile Asn Val Asp Asp Cys Asn Pro Pro Val Asp Pro Val 1220 1225 1230

Ser Arg Ser Pro Lys Cys Phe Asn Asn Gly Thr Cys Val Asp Gln 1235 1240 1245

								3370	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Val	Gly 1250		туr	' Ser	· Cys	Thr 1255	Cys	Pro	Pro	₋ Gly	Phe 1260	٧a٦	Gly	Glu
Arg	Cys 1265		Gly	Asp	Val	Asn 1270	Glu	Cys	Leu	ser	Asn 1275	Pro	Cys	Asp
Ala	Arg 1280		Thr	Gln	Asn	Cys 1285	۷a٦	Gln	Arg	Val	Asn 1290	Asp	Phe	His
Cys	Glu 1295		Arg	Ala	Gly	His 1300	Thr	GТу	Arg	Arg	Cys 1305	Glu	Ser	٧a٦
Ile	Asn 1310		Cys	Lys	Gly	Lys 1315	Pro	Cys	Ŀys	Asn	Gly 1320	σΊу	Thr	Cys
Αla	Val 1325		Ser	Asn	Thr	Ala 1330	Arg	Gly	Phe	Ile	Cys 1335	Lys	Cys	Pro
Αla	Gly 1340	Phe	Glu	Gly	Ala	Thr 1345	Cys	Glu	Asn	Asp	Ala 1350	Arg	Thr	Cys
Gly	Ser 1355	Leu	Arg	Cys	Leu	Asn 1360	Gly	Gly	Thr	Cys	Ile 1365	Ser	Gly	Pro
Arg	Ser 1370	Pro	Thr	Cys	Leu	Cys 1375	Leu'	Gly	Pro	Phe	Thr 1380	Glу	Pro	Glu
Cys	Gln 1385	Phe	Pro	Αla	Ser	ser 1390	Pro	Cys	Leu	Gly	Gly 1395	Asn	Pro	Cys
туг	Asn 1400	Gln	Gly	Thr	Cys	Glu 1405	Pro	Thr	Ser	Glu	ser 1410	Pro	Phe	Tyr
Arg	Cys 1415	Leu	Cys	Pro	Ala	Lys 1420	Phe	Asn	Gly	Leu	Leu 1425	Cys	His	Ile
Leu	Asp 1430	Tyr	Ser	Phe	Glу	Gly 1435	GÌу	Ala	Gly	Arg	Asp 1440	Ile	Pro	Pro
Pro	Leu 1445	Ile	Glu	Glu	Ala	Cys 1450	Glu	Leu	Pro	Glu	Cys. 1455	Gln	Glu	Asp
Ala	Gly 1460	Asn	Lýs	Val	Cys	ser 1465	Leu	Gln	Cys	Asn	Asn 1470	His	Ala	Cys
Gly	Trp 1475	Asp	Gly	Gly	Asp	Cys 1480	Ser	Leu	Asn	Phe	Asn 1485	Asp	Pro	Trp
Lys	Asn 1490	Cys	Thr	Gln	Ser	Leu 1495	Gln	Cys	Trp	Lys	Tyr 1500	Phe	ser	Asp

Gly	ніs 1505	Cys	Asp	Ser	Gln	Cys 1510	Asn	Ser	Ala	Glу	Cys 1515	Leu	Phe	Asp
Glу	Phe 1520	Asp	Cys	Gln	Arg	Ala 1525	Glu	Glу	G∏n	Cys	Asn 1530	Pro	Leu	Tyr
Asp	Gln 1535	Tyr	Cys	Lys	Asp	ніs 1540	Phe	Ser	Asp	Gly	ніs 1545	Cys	Asp	Gln
Glу	Cys 1550	Asn	Ser	Ala	Glu	Cys 1555	Glu	Trp	Asp	GТу	Leu 1560	Asp	Cys	ΑΊа
Glu	ніs 1565	٧a٦	Pro	Glu	Arg	Leu 1570	Αla	Ala	Gly	Thr	Leu 1575	val	val	val
val	Leu 1580	Met	Pro	Pro	Glu	Gln 1585	Leu	Arg	Asn	ser	ser 1590	Phe	His	Phe
Leu	Arg 1595	Gļu	Leu	ser	Arg	Val 1600	Leu	His	Thr	Asn	Val 1605	Val	Phe	Lys
Arg	Asp 1610	Αla	His	Glу	Gln	G]n 1615	Met	Ile	Phe	Pro	Tyr 1620	туг	Gly	Arg
Glu	Glu 1625	Glu	Leu	Arg	Lys	ніs 1630	Pro	Ile	Lys	Arg	Ala 1635	Ala	Glu	GТу
Trp	аlа 1640	Αla	Pro	Asp	Ala	Leu 1645	Leu	Glу	Gln	val.	Lys 1650	Ala	Ser	Leu
Leu	Pro 1655	Glу	Glу	Ser	Glu	Gly 1660	Glу	Arg	Arg	Arg	Arg 1665	Glu	Leu	Asp
Pro	Met 1670	Asp	val	Arg	Gly	Ser 1675	Ile	val	туг	Leu	Glu 1680	Ile	Asp	Asn
Arg	Gln 1685	Cys	val	Gln	Αla	Ser 1690	Ser	Gln	Cys	Phe	Gln 1695	Ser	Ala	Thr
Asp	Val 1700	Аlа	Αla	Phe	Leu	Gly 1705	Ala	Leu	Αla	Ser	Leu 1710	Gly	ser	Leu
Asn	Ile 1715	Pro	Tyr	Ļys	Ile	Glu 1720	Аlа	٧al	Gln	ser	Glu 1725	Thr	val	Glu
Pro	Pro 1730	Pro	Pro	Ala	Gln	Leu 1735	His	Phe	Met	туr	val 1740	Ala	ΑΊα	Аlа
Ala	Phe 1745	Val	Leu	Leu	Phe	Phe 1750	Val	Gly	Cys	Gly	Val 1755	Leu	Leu	ser

Arg Lys Arg Arg Arg Gln His Gly Gln Leu Trp Phe Pro Glu Gly 1760 1765 1770

Phe Lys Val Ser Glu Ala Ser Lys Lys Lys Arg Arg Glu Pro Leu 1775 1780 1785

Gly Glu Asp Ser Val Gly Leu Lys Pro Leu Lys Asn Ala Ser Asp 1790 1795 1800

Gly Ala Leu Met Asp Asp Asn Gln Asn Glu Trp Gly Asp Glu Asp 1805 1810 1815

Leu Glu Thr Lys Lys Phe Arg Phe Glu Glu Pro Val Val Leu Pro 1820 1830

Asp Leu Asp Asp Gln Thr Asp His Arg Gln Trp Thr Gln Gln His 1835 1840 1845

Leu Asp Ala Ala Asp Leu Arg Met Ser Ala Met Ala Pro Thr Pro 1850 1855 1860

Pro Gln Gly Glu Val Asp Ala Asp Cys Met Asp Val Asn Val Arg 1865 1870 1875

Gly Pro Asp Gly Phe Thr Pro Leu Met Ile Ala Ser Cys Ser Gly 1880 1885

Gly Gly Leu Glu Thr Gly Asn Ser Glu Glu Glu Glu Asp Ala Pro 1895 1900 1905

Ala Val Ile Ser Asp Phe Ile Tyr Gln Gly Ala Ser Leu His Asn 1910 1915 1920

Gln Thr Asp Arg Thr Gly Glu Thr Ala Leu His Leu Ala Ala Arg 1925 1930 1935

Tyr Ser Arg Ser Asp Ala Ala Lys Arg Leu Leu Glu Ala Ser Ala 1940 1945 1950

Asp Ala Asn Ile Gln Asp Asn Met Gly Arg Thr Pro Leu His Ala 1955 1960 1965

Ala Val Ser Ala Asp Ala Gln Gly Val Phe Gln Ile Leu Ile Arg 1970 1975 1980

Asn Arg Ala Thr Asp Leu Asp Ala Arg Met His Asp Gly Thr Thr 1985 1990 1995

Pro Leu Ile Leu Ala Ala Arg Leu Ala Val Glu Gly Met Leu Glu 2000 2005 2010

Asp	Leu 2015	Ile	Asn	Ser	His	Ala 2020	Asp	Val	Asn	Аla	Val 2025	Asp	Asp	Leu
Gly	Lys 2030	Ser	Αla	Leu	His	Trp 2035	Ala	Ala	Ala	Val	Asn 2040	Asn -	Val	Asp
Ala	д]а 2045		val	Leu	Leu	Lys 2050	Asn	Gly	Αla	Asn	Lys 2055	Asp	Met	Gln
Asn	Asn 2060		Glu	Glu	Thr	Pro 2065	Leu	Phe	Leu	Аlа	Ala 2070	Arg	Glu	Gly
Ser	Tyr 2075		·Thr	Ala	Lys	Val 2080	Ŀeu	Leu	Asp	ніѕ	Phe 2085	Ala	Asn	Arg
Asp	Ile 2090	Thr	Asp	His	Met	Asp 2095	Arg	Leu	Pro	Arg	Asp 2100	Ile	Ala	Gln
Glu	Arg 2105	Met	ніѕ	нis	Asp	Ile 2110	۷al	Arg	Leu	Leu	Asp 2115	Glu	Tyr	Asn
Leu	val 2120	Arg	Ser	Pro _.	.G]n	Leu 2125	His	Gly	Ala	Pro	Leu 2130	Gly	GТу	Thr
Pro	Thr 2135	Leu	Ser	Pro	Pro	Leu 2140	Cys	Ser	Pro	Asn	Gly 2145	Tyr	Leu	Glу
Ser	Leu 2150	Lys	Pro	Gly	۷a٦	G]n 2155	GТу	Lys	Lys	٧a٦	Arg 2160	Lys	Pro	Ser
Ser	Lys 2165	Gly	Leu	Αla	Cys	Gly 2170	Ser	Lys	Glu	Αla	Lys 2175	Asp	Leu	Lys
Ala	Arg 2180	Arg	Lys	Lys	Ser	G]n 2185	Asp	Gly	Ĺys	Gly	Cys 2190	Leu	Leu	Asp"
Ser	Ser 2195	Gly	Met	Leu	Ser	Pro 2200	va1	Asp	Ser	Leu	G]u 2205	Ser	Pro	His
Gly	Tyr 2210	Leu	Ser	Asp	Val	Ala 2215	Ser	Pro	Pro	Leu	Leu 2220	Pro	Ser	Pro
Phe	Gln 2225	Gln	Ser	Pro	Ser	Val 2230	Pro	Leu	Asn	ніѕ	Leu 2235	Pro	Glу	Met
Pro	Asp 2240	Thr	His	Leu	Gly	Ile 2245	Gly	ніѕ	Leu	Asn	va1 2250	Ala	Ala	Lys
Pro	G1u 2255	Met	Ala	Ala	Leu	G]y 2260	Glу	G]y ·	Gly	Arg	Leu 2265	Ala	Phe	Glu

								3940	7/A.	xτ.ι	Xι			
Thi	- Gly 2270) Pro	Arg	g Lei	J Ser 2275	His	Leu	Pro	val	Ala 2280		Gly	Thr
Ser	Thr 2285		Lei	и Gly	⁄ Ser	Ser 2290		· Gly	Gly	Ala	Leu 2295	Asn	Phe	Thr
۷al	Gly 2300		' Ser	Thr	' Ser	Leu 2305		Gly	Gln	Cys	Glu 2310		Leu	ser
Arg	Leu 2315		Ser	Gly	Met	val 2320		Asn	Gln	Tyr	Asn 2325		Leu	Arg
Gไу	ser 2330		Аlа	Pro	Gly	Pro 2335	⊹Leu	Ser	Thr	Gln	Ala 2340		Ser	Leu
Gln	ніs 2345		Met	٧a٦	Gly	Pro 2350		His	Ser	Ser	Leu 2355	Αla	Ala	Ser
Αla	Leu 2360		Gln	Met	Met	Ser 2365	Tyr	Gln	Gly	Leu	Pro 2370	Ser	Thr	Arg
Leu	Ala 2375		G]n	Pro	ніѕ	Leu 2380	۷al	Gln	Thr	Gln	G]n 2385	۷al	Gln	Pro
Gln	Asn 2390		G]n	Met	Gln	G]n 2395	Gln	Asn	Leu	Gln	Pro 2400	Ala	Asn	Ile
Gln	G1n 2405	Gln	Gln	ser	Leu	G]n 2410	Pro	Pro	Pro	Pro	Pro 2415	Pro	Gln	Pro
ніѕ	Leu 2420	Gly	٧a٦	Ser	ser	Ala 2425	Ala	Ser	Glу	His	Leu 2430	Gly	Arg	Ser
Phe	Leu 2435	Ser	Glу	Glu	Pro	Ser 2440	Gln	Ala	Asp	val	Gln 2445	Pro	Leu	Glу
Pro	Ser 2450	Ser	Leu	Ala	val	His 2455	Thr	Ile	Leu	Pro	G]n 2460	Glu	Ser	Pro
Ala	Leu 2465	Pro	Thr	Ser	Leu	Pro 2470	Ser	Ser	Leu	val	Pro 2475	Pro	Val	Thr
Аlа	Ala 2480	Gln	Phe	Leu	Thr	Pro 2485	Pro	Ser	Gln	His	ser 2490	туr	Ser	ser
Pro	va1 2495	Asp	Asn	Thr	Pro	Ser 2500	His	Gln	Leu	Gln	va1 2505	Pro	Glu	His
Pro	Phe 2510	Leu	Thr	Pro	Ser	Pro 2515	Glu	Ser	Pro	Asp	G]n 2520	Trp	ser	Ser

Ser Ser Pro His Ser Asn Val Ser Asp Trp Ser Glu Gly Val Ser 2525 2530 2535

Ser Pro Pro Thr Ser Met Gln Ser Gln Ile Ala Arg Ile Pro Glu 2540 2545 2550

Ala Phe Lys 2555

<210> 16 <211> 11433 <212> DNA

<213> Homo sapiens

<220> <221> misc_feature <223> Notch-2

<400> 60 aggctgcttc gttgcacacc cgagaaagtt tcagccaaac ttcgggcggc ggctgaggcg 120 gcggccgagg agcggcggac tcggggcgcg gggagtcgag gcatttgcgc ctgggcttcg 180 gagcgtagcg ccagggcctg agcctttgaa gcaggaggag gggaggagag agtggggctc ctctatcggg accccctccc catgtggatc tgcccaggcg gcggcggcgg cggcggagga 240 ggaggcgacc gagaagatgc ccgccctgcg ccccgctctg ctgtgggcgc tgctggcgct 300 360 ctggctgtgc tgcgcggccc ccgcgcatgc attgcagtgt cgagatggct atgaaccctg 420 tqtaaatqaa qqaatqtqtq ttacctacca caatggcaca ggatactgca aatgtccaga aggcttcttg ggggaatatt gtcaacatcg agacccctgt gagaagaacc gctgccagaa 480 540 tggtgggact tgtgtggccc aggccatgct ggggaaagcc acgtgccgat gtgcctcagg 600 gtttacagga gaggactgcc agtactcaac atctcatcca tgctttgtgt ctcgaccctg cctgaatggc ggcacatgcc atatgctcag ccgggatacc tatgagtgca cctgtcaagt 660 720 cgggtttaca ggtaaggagt gccaatggac ggatgcctgc ctgtctcatc cctgtgcaaa tggaagtacc tgtaccactg tggccaacca gttctcctgc aaatgcctca caggcttcac 780 agggcagaaa tgtgagactg atgtcaatga gtgtgacatt ccaggacact gccagcatgg 840 tggcacctgc ctcaacctgc ctggttccta ccagtgccag tgccctcagg gcttcacagg 900 ccagtactgt gacagcctgt atgtgccctg tgcaccctca ccttgtgtca atggaggcac 960 ctqtcqqcaq actqqtgact tcacttttga gtgcaactgc cttccaggtt ttgaagggag 1020 cacctgtgag aggaatattg atgactgccc taaccacagg tgtcagaatg gaggggtttg 1080 tgtggatggg gtcaacactt acaactgccg ctgtccccca caatggacag gacagttctg 1140 1200 cacagaggat gtggatgaat gcctgctgca gcccaatgcc tgtcaaaatg ggggcacctg tgccaaccgc aatggaggct atggctgtgt atgtgtcaac ggctggagtg gagatgactg 1260 1320 caqtqaqaac attqatgatt gtgccttcgc ctcctgtact ccaggctcca cctgcatcga

39467A.txt.txt 1380 ccqtqtqqcc tccttctctt gcatgtgccc agaggggaag gcaggtctcc tgtgtcatct 1440 ggatgatgca tgcatcagca atccttgcca caagggggca ctgtgtgaca ccaacccct aaatgggcaa tatatttgca cctgcccaca aggctacaaa ggggctgact gcacagaaga 1500 1560 tgtggatgaa tgtgccatgg ccaatagcaa tccttgtgag catgcaggaa aatgtgtgaa 1620 cacggatggc gccttccact gtgagtgtct gaagggttat gcaggacctc gttgtgagat ggacatcaat gagtgccatt cagacccctg ccagaatgat gctacctgtc tggataagat 1680 1740 tggaggcttc acatgtctgt gcatgccagg tttcaaaggt gtgcattgtg aattagaaat 1800 aaatgaatgt cagagcaacc cttgtgtgaa caatgggcag tgtgtggata aagtcaatcg tttccagtgc ctgtgtcctc ctggtttcac tgggccagtt tgccagattg atattgatga 1860 1920 ctgttccagt actccgtgtc tgaatggggc aaagtgtatc gatcacccga atggctatga atgccagtgt gccacaggtt.tcactggtgt gttgtgtgag gagaacattg acaactgtga 1980 2040 ccccgatcct tgccaccatg gtcagtgtca ggatggtatt gattcctaca cctgcatctg caatcccggg tacatgggcg ccatctgcag tgaccagatt gatgaatgtt acagcagccc 2100 ttgcctgaac gatggtcgct gcattgacct ggtcaatggc taccagtgca actgccagcc 2160 2220 aggcacgtca ggggttaatt gtgaaattaa ttttgatgac tgtgcaagta acccttgtat ccatggaatc tgtatggatg gcattaatcg ctacagttgt gtctgctcac caggattcac 2280 agggcagaga tgtaacattg acattgatga gtgtgcctcc aatccctgtc gcaagggtgc 2340 aacatgtatc aacggtgtga atggtttccg ctgtatatgc cccgagggac cccatcaccc 2400 cagctgctac tcacaggtga acgaatgcct gagcaatccc tgcatccatg gaaactgtac 2460 2520 tggaggtctc agtggatata agtgtctctg tgatgcaggc tgggttggca tcaactgtga 2580 agtggacaaa aatgaatgcc tttcgaatcc atgccagaat ggaggaactt gtgacaatct 2640 ggtgaatgga tacaggtgta cttgcaagaa gggctttaaa ggctataact gccaggtgaa 2700 tattgatgaa tgtgcctcaa atccatgcct gaaccaagga acctgctttg atgacataag 2760 tggctacact tgccactgtg tgctgccata cacaggcaag aattgtcaga cagtattggc 2820 tccctgttcc ccaaaccctt gtgagaatgc tgctgtttgc aaagagtcac caaattttga 2880 gagttatact tgcttgtgtg ctcctggctg gcaaggtcag cggtgtacca ttgacattga 2940 cgagtgtatc tccaagccct gcatgaacca tggtctctgc cataacaccc agggcagcta 3000 catgtgtgaa tgtccaccag gcttcagtgg tatggactgt gaggaggaca ttgatgactg 3060 ccttgccaat ccttgccaga atggaggttc ctgtatggat ggagtgaata ctttctcctg cctctgcctt ccgggtttca ctggggataa gtgccagaca gacatgaatg agtgtctgag 3120 3180 tgaaccctgt aagaatggag ggacctgctc tgactacgtc aacagttaca cttgcaagtg ccaggcagga tttgatggag tccattgtga gaacaacatc aatgagtgca ctgagagctc 3240 ctgtttcaat ggtggcacat gtgttgatgg gattaactcc ttctcttgct tgtgccctgt 3300 gggtttcact ggatccttct gcctccatga gatcaatgaa tgcagctctc atccatgcct 3360

	•		39467A.tx1			
gaatgaggga	acgtgtgttg	atggcctggg	tacctaccgo	tgcagctgcc	ccctgggcta	3420
cactgggaaa	aactgtcaga	ccctggtgaa	tctctgcagt	cggtctccat	gtaaaaacaa	3480
aggtacttgc	gttcagaaaa	aagcagagtc	ccagtgccta	tgtccatctg	gatgggctgg	3540
tgcctattgt	gacgtgccca	atgtctcttg	tgacatagca	ı gcctccagga	gaggtgtgct	3600
tgttgaacac	ttgtgccagc	actcaggtgt	ctgcatcaat	gctggcaaca	cgcattactg	3660
tcagtgcccc	ctgggctata	ctgggagcta	ctgtgaggag	caactcgatg	agtgtgcgtc	3720
caacccctgc	cagcacgggg	caacatgcag	tgacttcatt	ggtggataca	gatgcgagtg	3780
tgtcccaggc	tatcagggtg	tcaactgtga	gtatgaagtg	gatgagtgcc	agaatcagcc	3840
ctgccagaat	ggaggcacct	gtattgacct	tgtgaaccat	ttcaagtgct	cttgcccacc	3900
aggcactcgg	ggcctactct	gtgaagagaa	cattgatgac	tgtgcccggg	gtccccattg	3960
ccttaatggt	ggtcagtgca	tggataggat	tggaggctac	agttgtcgct	gcttgcctgg	4020
ctttgctggg	gagcgttgtg	agggagacat	caacgagtgc	ctctccaacc	cctgcagctc	4080
tgagggcagc	ctggactgta	tacageteae	caatgactac	ctgtgtgttt	gccgtagtgc	4140
ctttactggc	cggcactgtg	aaaccttcgt	cgatgtgtgt	ccccagatgc	cctgcctgaa	4200
tggagggact	tgtgctgtgg	ccagtaacat	gcctgatggt	ttcatttgcc	gttgtccccc	4260
gggattttcc	ggggcaaggt	gccagagcag	ctgtggacaa	gtgaaatgta	ggaaggggga	4320
gcagtgtgtg	cacaccgcct	ctggaccccg	ctgcttctgc	cccagtcccc	gggactgcga	4380
gtcaggctgt	gccagtagcc	cctgccagca	cgggggcagc	tgccaccctc	agcgccagcc	4440
tccttattac	tcctgccagt	gtgccccacc	attctcgggt	agccgctgtg	aactctacac	4500
ggcacccccc	agcacccctc	ctgccacctg	tctgagccag	tattgtgccg	acaaagctcg	4560
ggatggcgtc	tgtgatgagg	cctgcaacag	ccatgcctgc	cagtgggatg	ggggtgactg	4620
ttctctcacc	atggagaacc	cctgggccaa	ctgctcctcc	ccacttccct	gctgggatta	4680
tatcaacaac	cagtgtgatg	agctgtgcaa	cacggtcgag	tgcctgtttg	acaactttga	4740
atgccagggg	aacagcaaga	catgcaagta	tgacaaatac	tgtgcagacc	acttcaaaga	4800
caaccactgt	gaccaggggt	gcaacagtga	ggagtgtggt	tgggatgggc	tggactgtgc	4860
tgctgaccaa	cctgagaacc	tggcagaagg	taccctggtt	attgtggtat	tgatgccacc	4920
tgaacaactg	ctccaggatg	ctcgcagctt	cttgcgggca	ctgggtaccc	tgctccacac	4980
caacctgcgc	attaagcggg	actcccaggg	ggaactcatg	gtgtacccct	attatggtga	5040
gaagtcagct	gctatgaaga	aacagaggat	gacacgcaga	tcccttcctg	gtgaacaaga	5100
acaggaggtg	gctggctcta	aagtctttct	ggaaattgac	aaccgccagt	gtgttcaaga	5160
ctcagaccac ·	tgcttcaaga	acacggatgc	agcagcagct	ctcctggcct	ctcacgccat	5220
acaggggacc	ctgtcatacc	ctcttgtgtc	tgtcgtcagt	gaatccctga	ctccagaacg	5280
cactcagctc	ctctatctcc	ttgctgttgc	tgttgtcatc	attctgttta	ttattctgct	5340
gggggtaatc a	atggcaaaac	gaaagcgtaa	gcatggctct	ctctggctgc	ctgaaggttt	5400
		-				

cactcttcgc	cgagatgcaa	gcaatcacaa	39467A.txt gcgtcgtgag		aggatgctgt	5460
ggggctgaaa	aatctctcag	tgcaagtctc	agaagctaac	ctaattggta	ctggaacaag	5520
	gtcgatgatg					5580
cttactctca	gaagaagatg	accccattga	tcgacggcca	tggacacagc	agcaccttga	5640
agctgcagac	atccgtagga	caccatcgct	ggctctcacc	cctcctcagg	cagagcagga	5700
ggtggatgtg	ttagatgtga	atgtccgtgg	cccagatggc	tgcaccccat	tgatgttggc	5760
	ggaggcagct		-			5820
tgctaacatc	atcacagact	tggtctacca	gggtgccagc	ctccaggccc	agacagaccg	5880
gactggtgag	atggccctgc	accttgcagc	ccgctactca	cgggctgatg	ctgccaagcg	5940
tctcctggat	gcaggtgcag	atgccaatgc	ccaggacaac	atgggccgct	gtccactcca	6000
tgctgcagtg	gcagctgatg	cccaaggtgt	cttccagatt	ctgattcgca	accgagtaac	6060
tgatctagat	gccaggatga	atgatggtac	tacacccctg	atcctggctg	cccgcctggc	6120
tgtggaggga	atggtggcag	aactgatcaa	ctgccaagcg	gatgtgaatg	cagtggatga	6180
ccatggaaaa	tctgctcttc	actgggcagc	tgctgtcaat	aatgtggagg	caactcttt	6240
gttgttgaaa	aatggggcca	accgagacat	gcaggacaac	aaggaagaga	cacctctgtt	6300
tcttgctgcc	cgggagggga	gctatgaagc	agccaagatc	ctgttagacc	attttgccaa	6360
tcgagacatc	acagaccata	tggatcgtct	tccccgggat	gtggctcggg	atcgcatgca	6420
ccatgacatt	gtgcgccttc	tggatgaata	caatgtgacc	ccaagccctc	caggcaccgt	6480
gttgacttct	gctctctcac	ctgtcatctg	tgggcccaac	agatctttcc	tcagcctgaa	6540
gcacacccca	atgggcaaga	agtctagacg	gcccagtgcc	aagagtacca	tgcctactag	6600
cctccctaac	cttgccaagg	aggcaaagga	tgccaagggt	agtaggagga	agaagtctct	6660
gagtgagaag	gtccaactgt	ctgagagttc	agtaacttta	tcccctgttg	attccctaga	6720
atctcctcac	acgtatgttt	ccgacaccac	atcctctcca	atgattacat	cccctgggat	6780
cttacaggcc	tcacccaacc	ctatgttggc	cactgccgcc	cctcctgccc	cagtccatgc	6840
	ctatcttttt					6900
	ccctcagtga					6960
	ggaagcttga					7020
	gtgaatgaga					7080
	catcctggca					7140
	gagcccttgc					7200
	gcgggggctc					7260
	atgtaccaga					7320
	ccccagcagg					7380
tttcccagcc	tctgtgggca	agtaccccac	acccccttca	cagcacagtt	atgcttcctc	7440

39467A.txt.txt aaatgctgct gagcgaacac ccagtcacag tggtcacctc cagggtgagc atccctacct 7500 gacaccatcc ccagagtctc ctgaccagtg gtcaagttca tcaccccact ctgcttctga 7560 ctggtcagat gtgaccacca gccctacccc tgggggtgct ggaggaggtc agcggggacc 7620 tgggacacac atgtctgagc caccacacaa caacatgcag gtttatgcgt gagagagtcc 7680 acctccagtg tagagacata actgactttt gtaaatgctg ctgaggaaca aatgaaqqtc 7740 atccgggaga gaaatgaaga aatctctgga gccagcttct agaggtagga aagagaagat 7800 gttcttattc agataatgca agagaagcaa ttcgtcagtt tcactgggta tctgcaaggc 7860 7920 ttattgatta ttctaatcta ataagacaag tttgtggaaa tgcaagatga atacaagcct 7980 tgggtccatg tttactctct tctatttgga gaataagatg gatgcttatt gaagcccaga cattcttgca gcttggactg cattttaagc cctgcaggct tctgccatat ccatgagaag 8040 attctacact agcgtcctgt tgggaattat gccctggaat tctgcctgaa ttgacctacg 8100 8160 catctcctcc tccttggaca ttcttttgtc ttcatttggt gcttttggtt ttgcacctct 8220 ccgtgattgt agccctacca gcatgttata gggcaagacc tttgtgcttt tgatcattct ggcccatgaa agcaactttg gtctcctttc ccctcctgtc ttcccggtat cccttggagt 8280 ctcacaaggt ttactttggt atggttctca gcacaaacct ttcaagtatg ttgtttcttt 8340 ggaaaatgga catactgtat tgtgttctcc tgcatatatc attcctggag agagaagggg 8400 agaagaatac ttttcttcaa caaattttgg gggcaggaga tcccttcaag aggctgcacc 8460 ttaatttttc ttgtctgtgt gcaggtcttc atataaactt taccaggaag aagggtgtga 8520 gtttgttgtt tttctgtgta tgggcctggt cagtgtaaag ttttatcctt gatagtctag 8580 8640 ttactatgac cctccccact tttttaaaac cagaaaaagg tttggaatgt tggaatgacc 8700 aaqaqacaaq ttaactcgtg caagagccag ttacccaccc acaggtcccc ctacttcctg 8760 ccaagcattc cattgactgc ctgtatggaa cacatttgtc ccagatctga gcattctagg 8820 8880 atatccacag aagacactgt ctcaaatgtt gtacccttgc catttaggac tgaactttcc 8940 ttagcccaag ggacccagtg acagttgtct tccgtttgtc agatgatcag tctctactga 9000 ttatcttqct qcttaaaqqc ctqctcacca atctttcttt cacaccgtgt ggtccgtgtt actggtatac ccagtatgtt ctcactgaag acatggactt tatatgttca agtgcaggaa 9060 ttggaaagtt ggacttgttt tctatgatcc aaaacagccc tataagaagg ttggaaaagg 9120 9180 aggaactata tagcagcctt tgctattttc tgctaccatt tcttttcctc tgaagcggcc atgacattcc ctttggcaac taacgtagaa actcaacaga acattttcct ttcctagagt 9240 9300 caccttttag atgataatgg acaactatag acttgctcat tgttcagact gattgcccct cacctgaatc cactctctgt attcatgctc ttggcaattt ctttgacttt cttttaaggg 9360 cagaagcatt ttagttaatt gtagataaag aatagttttc ttcctcttct ccttgggcca 9420 9480 gttaataatt ggtccatggc tacactgcaa cttccgtcca gtgctgtgat gcccatgaca

	•		39467A.txt			05.40
cctgcaaaat	aagttctgco	tgggcatttt	gtagatatta	acaggtgaat	tcccgactct	9540
tttggtttga	atgacagtto	tcattccttc	tatggctgca	agtatgcatc	agtgcttccc	9600
acttacctga	tttgtctgtc	ggtggcccca	tatggaaacc	ctgcgtgtct	gttggcataa	9660
tagtttacaa	atggttttt	cagtcctatc	caaatttatt	gaaccaacaa	aaataattac	9720
ttctgccctg	agataagcag	attaagtttg	ttcattctct	gctttattct	ctccatgtgg	9780
caacattctg	tcagcctctt	tcatagtgtg	caaacatttt	atcattctaa	atggtgactc	9840
tctgcccttg	gacccattta	ttattcacag	atggggagaa	cctatctgca	tggacctctg	9900
tggaccacag	cgtacctgcc	cctttctgcc	ctcctgctcc	agccccactt	ctgaaagtat	9960
cagctactga	tccagccact	ggatatttta	tatcctccct	tttccttaag	cacaatgtca	10020
gaccaaattg	cttgtttctt	tttcttggac	tactttaatt	tggatccttt	gggtttggag	10080
aaagggaatg	tgaaagctgt	cattacagac	aacaggtttc	agtgatgagg	aggacaacac	10140
tgcctttcaa	actttttact	gatctcttag	attttaagaa	ctcttgaatt	gtgtggtatc	10200
taataaaagg	gaaggtaaga	tggataatca	ctttctcatt	tgggttctga	attggagact	10260
cagittttat	gagacacatc	ttttatgcca	tgtatagatc	ctccctgct	atttttggtt	10320
tatttttatt	gttataaatg	ctttctttct	ttgactcctc	ttctgcctgc	ctttggggat	10380
aggtttttt	gtttgtttat	ttgcttcctc	tgttttgttt	taagcatcat	tttcttatgt	10440
gaggtgggga	agggaaaggt	atgagggaaa	gagagtctga	gaattaaaat	attttagtat	10500
aagcaattgg	ctgtgatgct	caaatccatt	gcatcctctt	attgaatttg	ccaatttgta	10560
atttttgcat	aataaagaac	caaaggtgta	atgttttgtt	gagaggtggt	ttagggattt	10620
tggccctaac	caatacattg	aatgtatgat	gactatttgg	gaggacacat	ttatgtaccc	10680
agaggccccc	actaataagt	ggtactatgg	ttacttcctt	gtgtacattt	ctcttaaaag	10740
tgatattata	tctgtttgta	tgagaaaccc	agtaaccaat	aaaatgaccg	catattcctg	10800
actaaacgta	gtaaggaaaa	tgcacacttt	gtttttactt	ttccgtttca	ttctaaaggt	10860
agttaagatg	aaatttatat	gaaagcattt	ttatcacaaa	ataaaaaagg	tttgccaagc	10920
tcagtggtgt	tgtattttt	attttccaat	actgcatcca	tggcctggca	gtgttacctc	10980
atgatgtcat	aatttgctga	gagagcaaat	tttcttttct	ttctgaatcc	cacaaagcct	11040
agcaccaaac	ttctttttt	cttcctttaa	ttagatcata	aataaatgat	cctggggaaa	11100
aagcatctgt	caaataggaa	acatcacaaa	actgagcact	cttctgtgca	ctagccatag	11160
ctggtgacaa	acagatggtt	gctcagggac	aaggtgcctt	ccaatggaaa	tgcgaagtag	11220
ttgctatagc	aagaattggg	aactgggata	taagtcataa	tattaattat	gctgttatgt	11280
aaatgattgg					•	11340
ataaaataat						11400
agtcagtgag a						11433

<210> 17

<211> 2471

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Notch-2

<400> 17

Met Pro Ala Leu Arg Pro Ala Leu Leu Trp Ala Leu Leu Ala Leu Trp 1 10 15

Leu Cys Cys Ala Ala Pro Ala His Ala Leu Gln Cys Arg Asp Gly Tyr

Glu Pro Cys Val Asn Glu Gly Met Cys Val Thr Tyr His Asn Gly Thr 35 40 45

Gly Tyr Cys Lys Cys Pro Glu Gly Phe Leu Gly Glu Tyr Cys Gln His 50 60

Arg Asp Pro Cys Glu Lys Asn Arg Cys Gln Asn Gly Gly Thr Cys Val 65 70 75 80

Ala Gln Ala Met Leu Gly Lys Ala Thr Cys Arg Cys Ala Ser Gly Phe 85 90 95

Thr Gly Glu Asp Cys Gln Tyr Ser Thr Ser His Pro Cys Phe Val Ser 100 105 110

Arg Pro Cys Leu Asn Gly Gly Thr Cys His Met Leu Ser Arg Asp Thr

Tyr Glu Cys Thr Cys Gln Val Gly Phe Thr Gly Lys Glu Cys Gln Trp 130 135 140

Thr Asp Ala Cys Leu Ser His Pro Cys Ala Asn Gly Ser Thr Cys Thr 145 150 155 160

Thr Val Ala Asn Gln Phe Ser Cys Lys Cys Leu Thr Gly Phe Thr Gly 165 170 175

Gln Lys Cys Glu Thr Asp Val Asn Glu Cys Asp Ile Pro Gly His Cys 180 185 190

Gln His Gly Gly Thr Cys Leu Asn Leu Pro Gly Ser Tyr Gln Cys Gln 195 200 205

Cys Pro Gln Gly Phe Thr Gly Gln Tyr Cys Asp Ser Leu Tyr Val Pro 210 215 220

Cys Ala Pro Ser Pro Cys Val Asn Gly Gly Thr Cys Arg Gln Thr Gly

225 230

Asp Phe Thr Phe Glu Cys Asn Cys Leu Pro Gly Phe Glu Gly Ser Thr 245 250 255 Cys Glu Arg Asn Ile Asp Asp Cys Pro Asn His Arg Cys Gln Asn Gly 260 270 Gly Val Cys Val Asp Gly Val Asn Thr Tyr Asn Cys Arg Cys Pro Pro 275 280 285 Gln Trp Thr Gly Gln Phe Cys Thr Glu Asp Val Asp Glu Cys Leu Leu 290 ... 295 300 Gln Pro Asn Ala Cys Gln Asn Gly Gly Thr Cys Ala Asn Arg Asn Gly 305 310 315 320 Gly Tyr Gly Cys Val Cys Val Asn Gly Trp Ser Gly Asp Asp Cys Ser 325 330 335 Glu Asn Ile Asp Asp Cys Ala Phe Ala Ser Cys Thr Pro Gly Ser Thr 340 345 350 Cys Ile Asp Arg Val Ala Ser Phe Ser Cys Met Cys Pro Glu Gly Lys 355 360 365 Ala Gly Leu Leu Cys His Leu Asp Asp Ala Cys Ile Ser Asn Pro Cys 370 375 380 His Lys Gly Ala Leu Cys Asp Thr Asn Pro Leu Asn Gly Gln Tyr Ile 385 390 395 400 Cys Thr Cys Pro Gln Gly Tyr Lys Gly Ala Asp Cys Thr Glu Asp Val 405 410 415 Asp Glu Cys Ala Met Ala Asn Ser Asn Pro Cys Glu His Ala Gly Lys 420 425 430 Cys Val Asn Thr Asp Gly Ala Phe His Cys Glu Cys Leu Lys Gly Tyr 435 440 445 Ala Gly Pro Arg Cys Glu Met Asp Ile Asn Glu Cys His Ser Asp Pro 450 455 460 Cys Gln Asn Asp Ala Thr Cys Leu Asp Lys Ile Gly Gly Phe Thr Cys 465 470 475 480 Leu Cys Met Pro Gly Phe Lys Gly Val His Cys Glu Leu Glu Ile Asn 485 490 495 Glu Cys Gln Ser Asn Pro Cys Val Asn Asn Gly Gln Cys Val Asp Lys

500

510

Val Asn Arg Phe Gln Cys Leu Cys Pro Pro Gly Phe Thr Gly Pro Val 515 520 525 Cys Gln Ile Asp Ile Asp Asp Cys Ser Ser Thr Pro Cys Leu Asn Gly
530 540 Ala Lys Cys Ile Asp His Pro Asn Gly Tyr Glu Cys Gln Cys Ala Thr 545 550 555 560 Gly Phe Thr Gly Val Leu Cys Glu Glu Asn Ile Asp Asn Cys Asp 565 570 575 Asp Pro Cys His His Gly Gln Cys Gln Asp Gly Ile Asp Ser Tyr Thr 580 585 590 Cys Ile Cys Asn Pro Gly Tyr Met Gly Ala Ile Cys Ser Asp Gln Ile 595 600 605 Asp Glu Cys Tyr Ser Ser Pro Cys Leu Asn Asp Gly Arg Cys Ile Asp 610 615 620 Leu Val Asn Gly Tyr Gln Cys Asn Cys Gln Pro Gly Thr Ser Gly Val 625 630 635 640 Asn Cys Glu Ile Asn Phe Asp Asp Cys Ala Ser Asn Pro Cys Ile His 645 650 655 Gly Ile Cys Met Asp Gly Ile Asn Arg Tyr Ser Cys Val Cys Ser Pro 660 665 670 Gly Phe Thr Gly Gln Arg Cys Asn Ile Asp Ile Asp Glu Cys Ala Ser 675 680 685 Asn Pro Cys Arg Lys Gly Ala Thr Cys Ile Asn Gly Val Asn Gly Phe 690 695 700 Arg Cys Ile Cys Pro Glu Gly Pro His His Pro Ser Cys Tyr Ser Gln 705 710 715 720 Val Asn Glu Cys Leu Ser Asn Pro Cys Ile His Gly Asn Cys Thr Gly
725 730 735 Gly Leu Ser Gly Tyr Lys Cys Leu Cys Asp Ala Gly Trp Val Gly Ile 740 745 750 Asn Cys Glu Val Asp Lys Asn Glu Cys Leu Ser Asn Pro Cys Gln Asn 755 760 765 Gly Gly Thr Cys Asp Asn Leu Val Asn Gly Tyr Arg Cys Thr Cys Lys

770

775

39467A.txt.txt 780

Lys Gly Phe Lys Gly Tyr Asn Cys Gln Val Asn Ile Asp Glu Cys Ala 785 790 795 800 Ser Asn Pro Cys Leu Asn Gln Gly Thr Cys Phe Asp Asp Ile Ser Gly 805 810 815 Tyr Thr Cys His Cys Val Leu Pro Tyr Thr Gly Lys Asn Cys Gln Thr 820 825 830 Val Leu Ala Pro Cys Ser Pro Asn Pro Cys Glu Asn Ala Ala Val Cys 835 840 845 Lys Glu Ser Pro Asn Phe Glu Ser Tyr Thr Cys Leu Cys Ala Pro Gly 850 860 Trp Gln Gly Gln Arg Cys Thr Ile Asp Ile Asp Glu Cys Ile Ser Lys 865 870 875 Pro Cys Met Asn His Gly Leu Cys His Asn Thr Gln Gly Ser Tyr Met 885 890 895 Cys Glu Cys Pro Pro Gly Phe Ser Gly Met Asp Cys Glu Glu Asp Ile 900 905 Asp Asp Cys Leu Ala Asn Pro Cys Gln Asn Gly Gly Ser Cys Met Asp 915 925 Gly Val Asn Thr Phe Ser Cys Leu Cys Leu Pro Gly Phe Thr Gly Asp 930 940 Lys Cys Gln Thr Asp Met Asn Glu Cys Leu Ser Glu Pro Cys Lys Asn 945 950 955 960 Gly Gly Thr Cys Ser Asp Tyr Val Asn Ser Tyr Thr Cys Lys Cys Gln 965 970 975 Ala Gly Phe Asp Gly Val His Cys Glu Asn Asn Ile Asn Glu Cys Thr 980 985 990 Glu Ser Ser Cys Phe Asn Gly Gly Thr Cys Val Asp Gly Ile Asn Ser 995 1000 1005 Phe Ser Cys Leu Cys Pro Val Gly Phe Thr Gly Ser Phe Cys Leu 1010 1015 1020 His Glu Ile Asn Glu Cys Ser Ser His Pro Cys Leu Asn Glu Gly 1025 1035 Thr Cys Val Asp Gly Leu Gly Thr Tyr Arg Cys Ser Cys Pro Leu

1040 1045

Gly Tyr Thr Gly Lys Asn Cys Gln Thr Leu Val Asn Leu Cys Ser 1055 1060 1065

Arg Ser Pro Cys Lys Asn Lys Gly Thr Cys Val Gln Lys Lys Ala 1070 1075 1080

Glu Ser Gln Cys Leu Cys Pro Ser Gly Trp Ala Gly Ala Tyr Cys 1085 1090 1095

Asp Val Pro Asn Val Ser Cys Asp Ile Ala Ala Ser Arg Arg Gly 1100 1105

Val Leu Val Glu His Leu Cys Gln His Ser Gly Val Cys Ile Asn 1115 1120 1125

Ala Gly Asn Thr His Tyr Cys Gln Cys Pro Leu Gly Tyr Thr Gly 1130 1135 1140

Ser Tyr Cys Glu Glu Gln Leu Asp Glu Cys Ala Ser Asn Pro Cys 1145 1150 1155

Gln His Gly Ala Thr Cys Ser Asp Phe Ile Gly Gly Tyr Arg Cys 1160 1165 1170

Glu Cys Val Pro Gly Tyr Gln Gly Val Asn Cys Glu Tyr Glu Val 1175 1180 1185

Asp Glu Cys Gln Asn Gln Pro Cys Gln Asn Gly Gly Thr Cys Ile 1190 1195 1200

Asp Leu Val Asn His Phe Lys Cys Ser Cys Pro Pro Gly Thr Arg 1205 1210 1215

Gly Leu Leu Cys Glu Glu Asn Ile Asp Asp Cys Ala Arg Gly Pro 1220 1230

His Cys Leu Asn Gly Gly Gln Cys Met Asp Arg Ile Gly Gly Tyr 1235 1240 1245

Ser Cys Arg Cys Leu Pro Gly Phe Ala Gly Glu Arg Cys Glu Gly 1250 1260

Asp Ile Asn Glu Cys Leu Ser Asn Pro Cys Ser Ser Glu Gly Ser 1265 1270 1275

Leu Asp Cys Ile Gln Leu Thr Asn Asp Tyr Leu Cys Val Cys Arg 1280 1285 1290

Ser Ala Phe Thr Gly Arg His Cys Glu Thr Phe Val Asp Val Cys

39467A.txt.txt 1295 1300 1305

Pro Gln Met Pro Cys Leu Asn Gly Gly Thr Cys Ala Val Ala Ser 1310 1315 1320

Asn Met Pro Asp Gly Phe Ile Cys Arg Cys Pro Pro Gly Phe Ser 1325 1330 1335

Gly Ala Arg Cys Gln Ser Ser Cys Gly Gln Val Lys Cys Arg Lys 1340 1345 1350

Gly Glu Gln Cys Val His Thr Ala Ser Gly Pro Arg Cys Phe Cys 1355 1360 1365

Pro Ser Pro Arg Asp Cys Glu Ser Gly Cys Ala Ser Ser Pro Cys 1370 1375 1380

Gln His Gly Gly Ser Cys His Pro Gln Arg Gln Pro Pro Tyr Tyr 1385 1390 1395

Ser Cys Gln Cys Ala Pro Pro Phe Ser Gly Ser Arg Cys Glu Leu 1400 1405 1410

Tyr Thr Ala Pro Pro Ser Thr Pro Pro Ala Thr Cys Leu Ser Gln 1415 1420 1425

Tyr Cys Ala Asp Lys Ala Arg Asp Gly Val Cys Asp Glu Ala Cys 1430 1435 1440

Asn Ser His Ala Cys Gln Trp Asp Gly Gly Asp Cys Ser Leu Thr 1445 1450 1455

Met Glu Asn Pro Trp Ala Asn Cys Ser Ser Pro Leu Pro Cys Trp 1460 1465 1470

Asp Tyr Ile Asn Asn Gln Cys Asp Glu Leu Cys Asn Thr Val Glu 1475 1480 1485

Cys Leu Phe Asp Asn Phe Glu Cys Gln Gly Asn Ser Lys Thr Cys 1490 1495 1500

Lys Tyr Asp Lys Tyr Cys Ala Asp His Phe Lys Asp Asn His Cys 1505 1510 1515

Asp Gln Gly Cys Asn Ser Glu Glu Cys Gly Trp Asp Gly Leu Asp 1520 1530

Cys Ala Ala Asp Gln Pro Glu Asn Leu Ala Glu Gly Thr Leu Val 1535 1540 1545

Ile Val Val Leu Met Pro Pro Glu Gln Leu Leu Gln Asp Ala Arg

39467A.txt.txt 1550 1555 1560 Ser Phe Leu Arg Ala Leu Gly Thr Leu Leu His Thr Asn Leu Arg 1565 1570 1575 Ile Lys Arg Asp Ser Gln Gly Glu Leu Met Val Tyr Pro Tyr Tyr 1580 1590 Gly Glu Lys Ser Ala Ala Met Lys Lys Gln Arg Met Thr Arg Arg Ser Leu Pro Gly Glu Gln Glu Gln Glu Val Ala Gly Ser Lys Val 1615 1610 Phe Leu Glu Ile Asp Asn Arg Gln Cys Val Gln Asp Ser Asp His 1625 1630 1635 Cys Phe Lys Asn Thr Asp Ala Ala Ala Leu Leu Ala Ser His 1640 1650 Ala Ile Gln Gly Thr Leu Ser Tyr Pro Leu Val Ser Val Val Ser 1655 1660 1665 Glu Ser Leu Thr Pro Glu Arg Thr Gln Leu Leu Tyr Leu Leu Ala 1670 1680 Val Ala Val Val Ile Ile Leu Phe Ile Ile Leu Leu Gly Val Ile 1685 1690 1695

Met Ala Lys Arg Lys His Gly Ser Leu Trp Leu Pro Glu 1700 1710

Gly Phe Thr Leu Arg Arg Asp Ala Ser Asn His Lys Arg Arg Glu 1715 1720 1725

Pro Val Gly Gln Asp Ala Val Gly Leu Lys Asn Leu Ser Val Gln 1730 1740

Val Ser Glu Ala Asn Leu Ile Gly Thr Gly Thr Ser Glu His Trp 1745 1750 1755

Val Asp Asp Glu Gly Pro Gln Pro Lys Lys Val Lys Ala Glu Asp 1760 1765 1770

Glu Ala Leu Leu Ser Glu Glu Asp Asp Pro Ile Asp Arg Arg Pro 1775 1780 1785

Trp Thr Gln Gln His Leu Glu Ala Ala Asp Ile Arg Arg Thr Pro 1790 1795 1800

Ser Leu Ala Leu Thr Pro Pro Gln Ala Glu Gln Glu Val Asp Val

WO 2005/014854

39467A.txt.txt 1805 1810 1815

Leu Asp Val Asn Val Arg Gly Pro Asp Gly Cys Thr Pro Leu Met 1820 1830 Leu Ala Ser Leu Arg Gly Gly Ser Ser Asp Leu Ser Asp Glu Asp 1835 1840 1845 Glu Asp Ala Glu Asp Ser Ser Ala Asn Ile Ile Thr Asp Leu Val 1850 1860 Tyr Gln Gly Ala Ser Leu Gln Ala Gln Thr Asp Arg 1865 1870 1875 Thr Gly Glu Met Ala Leu His Leu Ala Ala Arg Tyr Ser Arg Ala Asp Ala Ala 1880 1885 1890 Lys Arg Leu Leu Asp Ala Gly Ala Asp Ala Asp Ala Gln Asp Asn 1895 1900 1905 Met Gly Arg Cys Pro Leu His Ala Ala Val Ala Ala Asp Ala Gln 1910 1915 1920 Gly Val Phe Gln Ile Leu Ile Arg Asn Arg Val Thr Asp Leu Asp Ala Arg Met Asn Asp Gly Thr Thr Pro Leu Ile Leu Ala Ala Arg 1945 Leu Ala Val Glu Gly Met Val Ala Glu Leu Ile Asn Cys Gln Ala 1955 1960 1965 1955 Asp Val Asn Ala Val Asp Asp His Gly Lys Ser Ala Leu His Trp 1970 1975 1980 Ala Ala Ala Val Asn Asn Val Glu Ala Thr Leu Leu Leu Leu Lys 1995 Asn Gly Ala Asn Arg Asp Met Gln Asp Asn Lys Glu Glu Thr Pro Leu Phe Leu Ala Ala Arg Glu Gly Ser Tyr Glu Ala Ala Lys Ile 2015 Leu Leu Asp His Phe Ala Asn Arg Asp Ile Thr Asp His Met Asp 2030 2035 2040 Arg Leu Pro Arg Asp Val Ala Arg Asp Arg Met His His Asp Ile 2045 2050 2055

Val Arg Leu Leu Asp Glu Tyr Asn Val Thr Pro Ser Pro Pro Gly

2060 2065

39467A.txt.txt 2070

Thr Val Leu Thr Ser Ala Leu Ser Pro Val Ile Cys Gly Pro Asn 2075 2080 2085

Arg Ser Phe Leu Ser Leu Lys His Thr Pro Met Gly Lys Lys Ser 2090 2095 2100

Arg Arg Pro Ser Ala Lys Ser Thr Met Pro Thr Ser Leu Pro Asn 2105 2110 2115

Leu Ala Lys Glu Ala Lys Asp Ala Lys Gly Ser Arg Lys Lys 2120 2125 2130

Ser Leu Ser Glu Lys Val Gln Leu Ser Glu Ser Ser Val Thr Leu 2135 2140 2145

Ser Pro Val Asp Ser Leu Glu Ser Pro His Thr Tyr Val Ser Asp 2150 2155 2160

Thr Thr Ser Ser Pro Met Ile Thr Ser Pro Gly Ile Leu Gln Ala 2165 2170 2175

Ser Pro Asn Pro Met Leu Ala Thr Ala Ala Pro Pro Ala Pro Val 2180 2185 2190

His Ala Gln His Ala Leu Ser Phe Ser Asn Leu His Glu Met Gln 2195 2200 2205

Pro Leu Ala His Gly Ala Ser Thr Val Leu Pro Ser Val Ser Gln 2210 2215 2220

Leu Leu Ser His His His Ile Val Ser Pro Gly Ser Gly Ser Ala 2225 2230 2235

Gly Ser Leu Ser Arg Leu His Pro Val Pro Val Pro Ala Asp Trp 2240 2245 2250

Met Asn Arg Met Glu Val Asn Glu Thr Gln Tyr Asn Glu Met Phe 2255 2260 2265

Gly Met Val Leu Ala Pro Ala Glu Gly Thr His Pro Gly Ile Ala 2270 2275 2280

Pro Gln Ser Arg Pro Pro Glu Gly Lys His Ile Thr Thr Pro Arg 2285 2290 2295

Glu Pro Leu Pro Pro Ile Val Thr Phe Gln Leu Ile Pro Lys Gly 2300 2305 2310

Ser Ile Ala Gln Pro Ala Gly Ala Pro Gln Pro Gln Ser Thr Cys

2315 2320

Pro Pro Ala Val Ala Gly Pro Leu Pro Thr Met Tyr Gln Ile Pro 2330 2340

Glu Met Ala Arg Leu Pro Ser Val Ala Phe Pro Thr Ala Met Met 2345 2350 2355

Pro Gln Gln Asp Gly Gln Val Ala Gln Thr Ile Leu Pro Ala Tyr 2360 2365 2370

His Pro Phe Pro Ala Ser Val Gly Lys Tyr Pro Thr Pro Pro Ser 2375 2380 2385

Gln His Ser Tyr Ala Ser Ser Asn Ala Ala Glu Arg Thr Pro Ser 2390 2395 2400

His Ser Gly His Leu Gln Gly Glu His Pro Tyr Leu Thr Pro Ser 2405 2410 2415

Pro Glu Ser Pro Asp Gln Trp Ser Ser Ser Pro His Ser Ala 2420 2425 2430

Ser Asp Trp Ser Asp Val Thr Thr Ser Pro Thr Pro Gly Gly Ala 2435 2440 2445

Gly Gly Gln Arg Gly Pro Gly Thr His Met Ser Glu Pro Pro 2450 2455 2460

His Asn Asn Met Gln Val Tyr Ala 2465 2470

<210> 18 <211> 8091

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Notch-3

<400> 18
acgcggcgcg gaggctggcc cgggacgcgc ccggagccca gggaaggagg gaggagggga 60
gggtcgcggc cggccgccat ggggccgggg gcccgtggcc gccgccgccg ccgtcgcccg 120
atgtcgccgc caccgccacc gccacccgtg cgggcgctgc ccctgctgct gctgctagcg 180
gggccggggg ctgcagcccc cccttgcctg gacggaagcc cgtgtgcaaa tggaggtcgt 240
tgcacccagc tgccctcccg ggaggctgcc tgcctgtgcc cgcctggctg ggtgggtgag 300
cggtgtcagc tggaggaccc ctgtcactca ggcccctgtg ctggccgtgg tgtctgccag 360
agttcagtgg tggctggcac cgcccgattc tcatgccggt gcccccgtgg cttccgaggc 420

39467A.txt.txt 480 cctgactgct ccctgccaga tccctgcctc agcagccctt gtgcccacgg tgcccgctgc 540 tcagtggggc ccgatggacg cttcctctgc tcctgcccac ctggctacca gggccgcagc 600 tgccgaagcg acgtggatga gtgccgggtg ggtgagccct gccgccatgg tggcacctgc 660 ctcaacacac ctggctcctt ccgctgccag tgtccagctg gctacacagg gccactatgt 720 gagaaccccg cggtgccctg tgcgccctca ccatgccgta acgggggcac ctgcaggcag 780. aqtqqcgacc tcacttacga ctgtgcctgt cttcctgggt ttgagggtca gaattgtgaa 840 qtqaacgtgg acgactgtcc aggacaccga tgtctcaatg gggggacatg cgtggatggc 900 qtcaacacct ataactgcca gtgccctcct gagtggacag gccagttctg cacggaggac 960 gtggatgagt gtcagctgca gcccaacgcc tgccacaatg ggggtacctg cttcaacacg ctgggtggcc acagctgcgt gtgtgtcaat ggctggacag gtgagagctg cagtcagaat 1020 1080 atcgatgact gtgccacagc cgtgtgcttc catggggcca cctgccatga ccgcgtggct tctttctact gtgcctgccc catgggcaag actggcctcc tgtgtcacct ggatgacgcc 1140 1200 tgtgtcagca acccctgcca cgaggatgct atctgtgaca caaatccggt gaacggccgg 1260 qccatttgca cctgtcctcc cggcttcacg ggtggggcat gtgaccagga tgtggacgag 1320 tgctctatcg gcgccaaccc ctgcgagcac ttgggcaggt gcgtgaacac gcagggctcc ttcctgtgcc agtgcggtcg tggctacact ggacctcgct gtgagaccga tgtcaacgag 1380 tgtctgtcgg ggccctgccg aaaccaggcc acgtgcctcg accgcatagg ccagttcacc 1440 tgtatctgta tggcaggctt cacaggaacc tattgcgagg tggacattga cgagtgtcag .1500 aqtaqcccct qtgtcaacgg tggggtctgc aaggaccgag tcaatggctt cagctgcacc 1560 1620 tgcccctcgg gcttcagcgg ctccacgtgt cagctggacg tggacgaatg cgccagcacg 1680 ccctgcagga atggcgccaa atgcgtggac cagcccgatg gctacgagtg ccgctgtgcc 1740 gagggctttg agggcacgct gtgtgatcgc aacgtggacg actgctcccc tgacccatgc caccatggtc gctgcgtgga tggcatcgcc agcttctcat gtgcctgtgc tcctggctac 1800 1860 acgggcacac gctgcgagag ccaggtggac gaatgccgca gccagccctg ccgccatggc 1920 ggcaaatgcc tagacctggt ggacaagtac ctctgccgct gcccttctgg gaccacaggt 1980 gtgaactgcg aagtgaacat tgacgactgt gccagcaacc cctgcacctt tggagtctgc cgtgatggca tcaaccgcta cgactgtgtc tgccaacctg gcttcacagg gcccctttgt 2040 2100 aacgtggaga tcaatgagtg tgcttccagc ccatgcggcg agggaggttc ctgtgtggat 2160 ggggaaaatg gcttccgctg cctctgcccg cctggctcct tgcccccact ctgcctcccc 2220 ccgagccatc cctgtgccca tgagccctgc agtcacggca tctgctatga tgcacctggc 2280 gggttccgct gtgtgtgtga gcctggctgg agtggccccc gctgcagcca gagcctggcc cgagacgcct gtgagtccca gccgtgcagg gccggtggga catgcagcag cgatggaatg 2340 2400 ggtttccact gcacctgccc gcctggtgtc cagggacgtc agtgtgaact cctctcccc 2460 tqcaccccqa acccctgtga gcatgggggc cgctgcgagt ctgcccctgg ccagctgcct

39467A.txt.txt gtctgctcct gcccccaggg ctggcaaggc ccacgatgcc agcaggatgt ggacgagtgt 2520 gctggccccg caccctgtgg ccctcatggt atctgcacca acctggcagg gagtttcagc 2580 tgcacctgcc atggagggta cactggccct tcctgtgatc aggacatcaa tgactgtgac 2640 cccaacccat gcctgaacgg tggctcgtgc caagacggcg tgggctcctt ttcctqctcc 2700 tgcctccctg gtttcgccgg cccacgatgc gcccgcgatg tggatgagtg cctgagcaac 2760 ccctgcggcc cgggcacctg taccgaccac gtggcctcct tcacctgcac ctgcccgccg 2820 ggctacggag gcttccactg cgaacaggac ctgcccgact gcagccccag ctcctgcttc 2880 aatggcggga cctgtgtgga cggcgtgaac tcgttcagct gcctgtgccg tcccqqctac 2940 acaggagece actgecaaca_tgaggeagae ccctgeetet egeggeeetg_ectaeaeqqq 3000 ggcgtctgca gcgccgccca ccctggcttc cgctgcacct gcctcgagag cttcacqqqc 3060 ccgcagtgcc agacgctggt ggattggtgc agccgccagc cttgtcaaaa cgggggtcqc 3120 tgcgtccaga ctggggccta ttgcctttgt ccccctggat ggagcggacg cctctgtgac 3180 atccgaagct tgccctgcag ggaggccgca gcccagatcg gggtgcggct ggagcagctg 3240 tgtcaggcgg gtgggcagtg tgtggatgaa gacagctccc actactgcgt gtgcccagag 3300 3360 ggccgtactg gtagccactg tgagcaggag gtggacccct gcttggccca gccctgccag 3420 catgggggga cctqccgtgg ctatatgggg ggctacatgt gtgagtgtct tcctggctac aatggtgata actgtgagga cgacgtggac gagtgtgcct cccagccctg ccagcacggg 3480 ggttcatgca ttgacctcgt ggcccgctat ctctgctcct gtcccccagg aacgctgggg 3540 gtgctctgcg agattaatga ggatgactgc ggcccaggcc caccgctgga ctcagggccc 3600 cggtgcctac acaatggcac ctgcgtggac ctggtgggtg gtttccgctg cacctgtccc 3660 ccaqqataca ctggtttgcg ctgcgaggca gacatcaatg agtgtcgctc aggtgcctgc 3720 3780 cacgcggcac acacccggga ctgcctgcag gacccaggcg gaggtttccg ttgcctttgt catgctggct tctcaggtcc tcgctgtcag actgtcctgt ctccctgcga gtcccagcca 3840 tgccagcatg gaggccagtg ccgtcctagc ccgggtcctg ggggtgggct gaccttcacc 3900 tgtcactgtg cccagccgtt ctggggtccg cgttgcgagc gggtggcgcg ctcctgccgg 3960 gagctgcagt gcccggtggg cgtcccatgc cagcagacgc cccgcgggcc gcgctgcgcc 4020 tgcccccag ggttgtcggg accctcctgc cgcagcttcc cggggtcgcc gccgggggcc 4080 agcaacgcca gctgcgcggc cgcccctgt ctccacgggg gctcctgccg ccccgcgccg 4140 ctcgcgccct tcttccgctg cgcttgcgcg cagggctgga ccgggccgcg ctgcgaggcg 4200 cccqccqcqq cacccgaggt ctcggaggag ccgcggtgcc cgcgcgccgc ctgccaggcc 4260 aaqcqcqqqq accagcgctg cgaccgcgag tgcaacagcc caggctgcgg ctgggacggc 4320 ggcgactgct cgctgagcgt gggcgacccc tggcggcaat gcgaggcgct gcagtgctgg 4380 cgcctcttca acaacagccg ctgcgacccc gcctgcagct cgcccgcctg cctctacgac 4440 aacttcqact qccacgccgg tggccgcgag cgcacttgca acccggtgta cgagaagtac 4500

39467A.txt.txt tgcgccgacc actttgccga cggccgctgc gaccagggct gcaacacgga ggagtgcggc 4560 tgggatgggc tggattgtgc cagcgaggtg ccggccctgc tggcccgcgg cgtgctggtg 4620 ctcacagtgc tgctgccgcc ggaggagcta ctgcgttcca gcgccgactt tctgcagcgg 4680 ctcagcgcca tcctgcgcac ctcgctgcgc ttccgcctgg acgcgcacgg ccaggccatq 4740 gtcttccctt accaccggcc tagtcctggc tccgaacccc gggcccgtcg ggagctggcc 4800 cccgaggtga tcggctcggt agtaatgctg gagattgaca accggctctg cctgcagtcg 4860 cctgagaatg atcactgctt ccccgatgcc cagagcgccg ctgactacct gggagcgttg 4920 tcagcggtgg agcgcctgga cttcccgtac ccactgcggg acgtgcgggg ggagccgctg 4980 gagcctccag aacccagcgt cccgctgctg ccactgctag tggcgggcgc tgtcttgctg 5040 ctggtcattc tcgtcctggg tgtcatggtg gcccggcgca agcgcgagca cagcacctc 5100 tggttccctg agggcttctc actgcacaag gacgtggcct ctggtcacaa gggccggcgg 5160 gaacccgtgg gccaggacgc gctgggcatg aagaacatgg ccaagggtga gagcctgatg 5220 ggggaggtgg ccacagactg gatggacaca gagtgcccag aggccaagcg gctaaaggta 5280 gaggagccag gcatgggggc tgaggaggct gtggattgcc gtcagtggac tcaacaccat 5340 5400 ctggttgctg ctgacatccg cgtggcacca gccatggcac tgacaccacc acagggcgac 5460 gcagatgctg atggcatgga tgtcaatgtg cgtggcccag atggcttcac cccgctaatg 5520 ctggcttcct tctgtggggg ggctctggag ccaatgccaa ctgaagagga tgaggcagat 5580 gacacatcag ctagcatcat ctccgacctg atctgccagg gggctcagct tggggcacgg 5640 actgaccgta ctggcgagac tgctttgcac ctggctgccc gttatgcccg tgctgatgca 5700 gccaagcggc tgctggatgc tggggcagac accaatgccc aggaccactc aggccgcact 5760 cccctgcaca cagctgtcac agccgatgcc cagggtgtct tccagattct catccgaaac 5820 cgctctacag acttggatgc ccgcatggca gatggctcaa cggcactgat cctggcggcc 5880 cgcctggcag tagagggcat ggtggaagag ctcatcgcca gccatgctga tgtcaatgct 5940 gtggatgagc ttgggaaatc agccttacac tgggctgcgg ctgtgaacaa cgtggaagcc actttggccc tgctcaaaaa tggagccaat aaggacatgc aggatagcaa ggaggagacc 6000 cccctattcc tggccgcccg cgagggcagc tatgaggctg ccaagctgct gttggaccac 6060 6120 tttgccaacc gtgagatcac cgaccacctg gacaggctgc cgcgggacgt agcccaggag agactgcacc aggacatcgt gcgcttgctg gatcaaccca gtgggccccg cagcccccc 6180 6240 ggtccccacg gcctggggcc tctgctctgt cctccagggg ccttcctccc tggcctcaaa gcggcacagt cggggtccaa gaagagcagg aggccccccg ggaaggcggg gctggggccg 6300 caggggcccc gggggcgggg caagaagctg acgctggcct gcccgggccc cctggctgac 6360 agctcqqtca cqctqtcqcc cqtggactcg ctggactccc cgcggccttt cggtgggccc 6420 cctgcttccc ctggtggctt cccccttgag gggccctatg cagctgccac tgccactgca 6480 gtgtctctgg cacagcttgg tggcccaggc cgggcaggtc tagggcgcca gccccctgga 6540

```
39467A.txt.txt
 ggatgtgtac tcagcctggg cctgctgaac cctgtggctg tgcccctcga ttgqqcccqq
                                                                 6600
ctgccccac ctgcccctcc aggcccctcg ttcctgctgc cactggcgcc gggaccccag
                                                                6660
ctgctcaacc cagggacccc cgtctccccg caggagcggc ccccgcctta cctqqcaqtc
                                                                 6720
ccaggacatg gcgaggagta cccggtggct ggggcacaca gcagcccccc aaaqqcccqc
                                                                6780
ttcctqcqqq ttcccaqtqa qcacccttac ctqaccccat ccccqaatc ccctqaqcac
                                                                6840
tgggccagcc cctcacctcc ctccctctca gactggtccg aatccacgcc tagcccagcc
                                                                6900
actgccactg gggccatggc caccaccact ggggcactgc ctgcccagcc acttcccttg
                                                                6960
tctgttccca gctcccttgc tcaggcccag acccagctgg ggccccagcc ggaagttacc
                                                                7020
cccaagaggc aagtgttggc ctgagacgct cgtcagttct tagatcttgg gggcctaaaq
                                                                7080
agacccccgt cctgcctcct ttctttctct gtctcttcct tccttttagt ctttttcatc
                                                                7140
7200
                                                                7260
tcagcccagg gcttcagtct tcctttattt ataatgggtg ggggctacca cccaccctct
cagtettgtg aagagtetgg gaceteette tteeceactt etetetteee teatteettt
                                                                7320
ctctctcctt ctggcctctc atttccttac actctgacat gaatgaatta ttattatttt
                                                                7380
tctttttctt ttttttttta cattttgtat agaaacaaat tcatttaaac aaacttatta
                                                                7440
ttattatttt ttacaaaata tatatatgga gatgctccct ccccctgtga accccccagt
                                                                7500
gccccgtgg ggctgagtct gtgggcccat tcggccaagc tggattctgt gtacctagta
                                                                7560
                                                                7620
cacaggcatg actgggatcc cgtgtaccga gtacacgacc caggtatgta ccaagtaggc
accettggge geacceactg gggecagggg tegggggagt gttgggagee teeteceae
                                                                7680
cccacctccc tcacttcact gcattccaga ttggacatgt tccatagcct tgctggggaa
                                                                7740
gggcccactg ccaactccct ctgccccagc cccacccttg gccatctccc tttgggaact
                                                                7800
agggggctgc tggtgggaaa tgggagccag ggcagatgta tgcattcctt tatgtccctg
                                                                7860
taaatgtggg actacaagaa gaggagctgc ctgagtggta ctttctcttc ctggtaatcc
                                                                7920
tctggcccag ccttatggca gaatagaggt atttttaggc tatttttgta atatggcttc
                                                                7980
tggtcaaaat ccctgtgtag ctgaattccc aagccctgca ttgtacagcc ccccactccc
                                                                8040
8091
```

```
<210> 19
<211> 2321
<212> PRT
<213> Homo sapiens
```

<400> 19

Met Gly Pro Gly Ala Arg Gly Arg Arg Arg Arg Arg Pro Met Ser

<220> <221> misc_feature <223> Notch-3

Pro Pro Pro Pro Pro Pro Val Arg Ala Leu Pro Leu Leu Leu 20 25 30 Leu Ala Gly Pro Gly Ala Ala Ala Pro Pro Cys Leu Asp Gly Ser Pro
35 40 45 Cys Ala Asn Gly Gly Arg Cys Thr Gln Leu Pro Ser Arg Glu Ala Ala 50 55 60 Cys Leu Cys Pro Pro Gly Trp Val Gly Glu Arg Cys Gln Leu Glu Asp 65 70 75 80 Pro Cys His Ser Gly Pro Cys Ala Gly Arg Gly Val Cys Gln Ser Ser Val Val Ala Gly Thr Ala Arg Phe Ser Cys Arg Cys Pro Arg Gly Phe 100 105 110 Arg Gly Pro Asp Cys Ser Leu Pro Asp Pro Cys Leu Ser Ser Pro Cys 115 120 125 Ala His Gly Ala Arg Cys Ser Val Gly Pro Asp Gly Arg Phe Leu Cys 130 135 140 Ser Cys Pro Pro Gly Tyr Gln Gly Arg Ser Cys Arg Ser Asp Val Asp 145 150 160 Glu Cys Arg Val Gly Glu Pro Cys Arg His Gly Gly Thr Cys Leu Asn 165 170 175 Thr Pro Gly Ser Phe Arg Cys Gln Cys Pro Ala Gly Tyr Thr Gly Pro 180 185 Leu Cys Glu Asn Pro Ala Val Pro Cys Ala Pro Ser Pro Cys Arg Asn 195 200 205 Gly Gly Thr Cys Arg Gln Ser Gly Asp Leu Thr Tyr Asp Cys Ala Cys 210 215 220 Leu Pro Gly Phe Glu Gly Gln Asn Cys Glu Val Asn Val Asp Asp Cys 225 230 235 240 Pro Gly His Arg Cys Leu Asn Gly Gly Thr Cys Val Asp Gly Val Asn 245 250 255 Thr Tyr Asn Cys Gln Cys Pro Pro Glu Trp Thr Gly Gln Phe Cys Thr 260 265 270 Glu Asp Val Asp Glu Cys Gln Leu Gln Pro Asn Ala Cys His Asn Gly 275 280 285

Gly Thr Cys Phe Asn Thr Leu Gly Gly His Ser Cys Val Cys Val Asn 290 295 300 Gly Trp Thr Gly Glu Ser Cys Ser Gln Asn Ile Asp Asp Cys Ala Thr 305 310 315 Ala Val Cys Phe His Gly Ala Thr Cys His Asp Arg Val Ala Ser Phe 325 330 335 Tyr Cys Ala Cys Pro Met Gly Lys Thr Gly Leu Leu Cys His Leu Asp 340 345 350 Asp Ala Cys Val Ser Asn Pro Cys His Glu Asp Ala Ile Cys Asp Thr 355 360 365 Asn Pro Val Asn Gly Arg Ala Ile Cys Thr Cys Pro Pro Gly Phe Thr 370 375 380 Gly Gly Ala Cys Asp Gln Asp Val Asp Glu Cys Ser Ile Gly Ala Asn 385 390 395 400 Pro Cys Glu His Leu Gly Arg Cys Val Asn Thr Gln Gly Ser Phe Leu 405 410 415 Cys Gln Cys Gly Arg Gly Tyr Thr Gly Pro Arg Cys Glu Thr Asp Val 420 425 430 Asn Glu Cys Leu Ser Gly Pro Cys Arg Asn Gln Ala Thr Cys Leu Asp 445 Arg Ile Gly Gln Phe Thr Cys Ile Cys Met Ala Gly Phe Thr Gly Thr 450 460 Tyr Cys Glu Val Asp Ile Asp Glu Cys Gln Ser Ser Pro Cys Val Asn 465 470 475 480 Gly Gly Val Cys Lys Asp Arg Val Asn Gly Phe Ser Cys Thr Cys Pro 485 490 495 Ser Gly Phe Ser Gly Ser Thr Cys Gln Leu Asp Val Asp Glu Cys Ala 500 505 510 Ser Thr Pro Cys Arg Asn Gly Ala Lys Cys Val Asp Gln Pro Asp Gly 515 520 525 Tyr Glu Cys Arg Cys Ala Glu Gly Phe Glu Gly Thr Leu Cys Asp Arg 530 540 Asn Val Asp Asp Cys Ser Pro Asp Pro Cys His His Gly Arg Cys Val 545 550 555 560

Asp Gly Ile Ala Ser Phe Ser Cys Ala Cys Ala Pro Gly Tyr Thr Gly
565 575 Thr Arg Cys Glu Ser Gln Val Asp Glu Cys Arg Ser Gln Pro Cys Arg 580 585 590 His Gly Gly Lys Cys Leu Asp Leu Val Asp Lys Tyr Leu Cys Arg Cys 595 600 605 Pro Ser Gly Thr Thr Gly Val Asn Cys Glu Val Asn Ile Asp Asp Cys 610 620 Ala ser Asn Pro Cys Thr Phe Gly Val Cys Arg Asp Gly Ile Asn Arg 625 630 635 640 Tyr Asp Cys Val Cys Gln Pro Gly Phe Thr Gly Pro Leu Cys Asn Val 645 650 655 Glu Ile Asn Glu Cys Ala Ser Ser Pro Cys Gly Glu Gly Gly Ser Cys 660 665 670 Val Asp Gly Glu Asn Gly Phe Arg Cys Leu Cys Pro Pro Gly Ser Leu 675 680 685 Pro Leu Cys Leu Pro Pro Ser His Pro Cys Ala His Glu Pro Cys 690 695 700 Ser His Gly Ile Cys Tyr Asp Ala Pro Gly Gly Phe Arg Cys Val Cys 705 710 715 720 Glu Pro Gly Trp Ser Gly Pro Arg Cys Ser Gln Ser Leu Ala Arg Asp 725 730 735 Ala Cys Glu Ser Gln Pro Cys Arg Ala Gly Gly Thr Cys Ser Ser Asp 740 745 Gly Met Gly Phe His Cys Thr Cys Pro Pro Gly Val Gln Gly Arg Gln 755 760 765 Cys Glu Leu Leu Ser Pro Cys Thr Pro Asn Pro Cys Glu His Gly Gly 770 780 Arg Cys Glu Ser Ala Pro Gly Gln Leu Pro Val Cys Ser Cys Pro Gln 785 790 795 800 Gly Trp Gln Gly Pro Arg Cys Gln Gln Asp Val Asp Glu Cys Ala Gly 805 810 Pro Ala Pro Cys Gly Pro His Gly Ile Cys Thr Asn Leu Ala Gly Ser 820 825 830

Phe Ser Cys Thr Cys His Gly Gly Tyr Thr Gly Pro Ser Cys Asp Gln 835 840

Asp Ile Asn Asp Cys Asp Pro Asn Pro Cys Leu Asn Gly Gly Ser Cys 850 860

Gln Asp Gly Val Gly Ser Phe Ser Cys Ser Cys Leu Pro Gly Phe Ala 865 870 875 880

Gly Pro Arg Cys Ala Arg Asp Val Asp Glu Cys Leu Ser Asn Pro Cys 885 890 895

Gly Pro Gly Thr Cys Thr Asp His Val Ala Ser Phe Thr Cys Thr Cys 900 905 910

Pro Pro Gly Tyr Gly Gly Phe His Cys Glu Gln Asp Leu Pro Asp Cys 915 920 925

Ser Pro Ser Ser Cys Phe Asn Gly Gly Thr Cys Val Asp Gly Val Asn 930 940

Ser Phe Ser Cys Leu Cys Arg Pro Gly Tyr Thr Gly Ala His Cys Gln 945 950 955 960

His Glu Ala Asp Pro Cys Leu Ser Arg Pro Cys Leu His Gly Gly Val 965 970 975

Cys Ser Ala Ala His Pro Gly Phe Arg Cys Thr Cys Leu Glu Ser Phe 980 985 990

Thr Gly Pro Gln Cys Gln Thr Leu Val Asp Trp Cys Ser Arg Gln Pro 995 1000 1005

Cys Gln Asn Gly Gly Arg Cys Val Gln Thr Gly Ala Tyr Cys Leu 1010 1015 1020

Cys Pro Pro Gly Trp Ser Gly Arg Leu Cys Asp Ile Arg Ser Leu 1025 1030 1035

Pro Cys Arg Glu Ala Ala Ala Gln Ile Gly Val Arg Leu Glu Gln 1040 1045 1050

Leu Cys Gln Ala Gly Gly Gln Cys Val Asp Glu Asp Ser Ser His 1055 1060 1065

Tyr Cys Val Cys Pro Glu Gly Arg Thr Gly Ser His Cys Glu Gln 1070 1075 1080

Glu Val Asp Pro Cys Leu Ala Gln Pro Cys Gln His Gly Gly Thr 1085 1090 1095

								3940)/A. l	Х L • С	. X L			
Cys	; Arg 1100	Gly	/ Tyr	Met	Gly	/ Gly 1105	Tyr	Met	Cys	Glu	Cys 1110	Leu	Pro	Gly
Tyr	Asn 1115		/ Asp) Asn	Cys	Glu 1120		Asp	۷al	Asp	G]u 1125	Cys	Αla	Ser
Gln	Pro 1130		Gln	His	Gไу	Gly 1135	Ser	Cys	Ile	Asp	Leu 1140	Val	Аlа	Arg
Tyr	Leu 1145		ser	Cys	Pro	Pro 1150		Thr	Leu	σΊу	Val 1155	Leu	Cys	Glu
Ile	Asn 1160		ÄSp	Asp	`Cys	Gly 1165	Pro	Gly	Pro	Pro	Leu 1170	Asp	Ser	Glу
Pro	Arg 1175	Cys	Leu	His	Asn	Gly 1180		Cys	٧a٦	Asp	Leu 1185	٧a٦	GТу	Glу
Phe	Arg 1190	Cys	Thr	Cys	Pro	Pro 1195	Glу	Tyr	Thr	Gly	Leu 1200	Arg	Cys	Glu
Ala	Asp 1205		Asn	Glu	Cys	Arg 1210	Ser	Gly	Ala	Cys	Нis 1215	Ala	Ala	His
Thr	Arg 1220		Cys	Leu	Gln	Asp 1225	Pro	Gly	Gly	Gly	Phe 1230	Arg	Cys	Leu
Cys	His 1235	Аlа	Gly	Phe	Ser	Gly 1240	Pro	Arg	Cys	Gln	Thr 1245	Val	Leu	Ser
Pro	Cys 1250	Glu	Ser	Gln	Pro	Cys 1255	Gln	His	GТу	GТу	G]n 1260	Cys	Arg	Pro
Ser	Pro 1265		Pro	Gly	Gly	Gly 1270	Leu	Thr	Phe	Thr	Cys 1275	His	Cys	Ala
Gไn	Pro 1280	Phe	Trp	Gly	Pro	Arg 1285	Cys	Glu	Arg	val	Ala 1290	Arg	Ser	Cys
Arg	G]u 1295	Leu	Gln	Cys	Pro	Val 1300	Gly	val	Pro	Cys	G]n 1305	Gln	Thr	Pro
Arg	Gly 1310	Pro	Arg	Cys	Ala	Cys 1315	Pro	Pro	Gly	Leu	ser 1320	Glу	Pro	Ser
Cys	Arg 1325	Ser	Phe	Pro	Gไу	Ser 1330	Pro	Pro	Gly	Ala	Ser 1335	Asn	Ala	Ser
Cys	Ala 1340	Ala	Αla	Pro	Cys	Leu 1345	His	Gly	Gly	Ser	Cys 1350	Arg	Pro	Ala

								33.0	.,,					
Pro	Leu 1355	Ala	Pro	Phe	Phe	e Arg 1360	Cys	ala	Cys	Αla	G]n 1365		Trp	Thr
GÌy	Pro 1370		y Cys	G]u	ı Ala	Pro 1375	Ala	Ala	Ala	Pro	Glu 1380	val	Ser	Glu
Glu	Pro 1385) Cys	Pro	Arg	Ala 1390	Ala	Cys	Gln	Ala	Lys 1395	Arg	Gly	Asp
Gln	Arg 1400		Asp	Arg	Glu	Cys 1405	Asn	Ser	Pro	Gly	Cys 1410		Trp	Asp
Gly	Gly 1415		Cys	Ser	Ľeü	Ser 1420	'Val	Gly	Asp	Pro	Trp 1425	Arg	Gln	Cys
Glu	А]а 1430		Gln	Cys	Trp	Arg 1435	Leu	Phe	Asn	Asn	Ser 1440	Arg	Cys	Asp
Pro	А]а 1445	Cys	Ser	Ser	Pro	Ala 1450	Cys	Leu	Tyr	Asp	Asn 1455	Phe	Asp	Cys
His	Ala 1460	Gly	GТу	Arg	Glu	Arg 1465	Thr	Cys	Asn	Pro	Val 1470	Tyr	Glu	Lys
Туг	Cys 1475	Ala	Asp	His	Phe	Ala 1480	Asp	Gly	Arg	Cys	Asp 1485	Gln	Gly	Cys
Asn	Thr 1490	Glu	Glu	Cys	Gly	Trp 1495	Asp	Gly	Leu	Asp	Cys 1500	Ala	Ser	Glu
۷al	Pro 1505	Αla	Leu	Leu	Ala	Arg 1510	GЈу	val	Leu	Val	Leu 1515	Thr	Val	Leu
Leu	Pro 1520	Pro	Glu	Glu	Leu	Leu 1525	Arg	Ser	ser	Ala	Asp 1530	Phe	Leu	G∏n
Arg	Leu 1535	Ser	Ala	Ile	Leu	Arg 1540	Thr	Ser	Leu	Arg	Phe 1545	Arg	Leu	Asp
Ala	His 1550	Gly	G]n	Ala	Met	Val 1555	Phe	Pro	Tyr	His	Arg 1560	Pro	Ser	Pro
Gly	Ser 1565	Glu	Pro	Arg	Ala	Arg 1570	Arg	Glu	Leu	ΑΊa	Pro 1575	Glu	٧a٦	Ile
Gly	ser 1580	Val	val	Met	Leu	Glu 1585	Ile	Asp	Asn	Arg	Leu 1590	Cys	Leu	Gln
Ser	Pro 1595	Glu	Asn	Asp	His	Cys 1600	Phe	Pro	Asp	Ala	Gln 1605	Ser	Аla	Ala

Asp	Tyr 1610		Gly	Аlа	Leu	Ser 1615	Аla	٧a٦	Glu	Arg	Leu 1620	Asp	Phe	Pro
Tyr	Pro 1625	Leu	Arg	Asp	Val	Arg 1630	Glу	Glu	Pro	Leu	Glu 1635	Pro	Pro	Glu
Pro	ser 1640		Pro	Leu	Leu	Pro 1645	Leu	Leu	Val	Αla	Gly 1650	Аlа	Val	Leu
Leu	Leu 1655		Ile	Leu	۷a٦	Leu 1660		Val	Met	val	Ala 1665	Arg	Arg	Lys
Arg	GTu 1670		Sér	Thr	Ľeu	Trp 1675	Phë	Pro	Glü	ĠĴý	Phe 1680	Ser	Leu	His
Lys	Asp 1685		Ala	Ser	Gly	ніs 1690	Lys	Gly	Arg	Arg	Glu 1695	Pro	٧a٦	Gไу
GÌn	Asp 1700		Leu	Glу	Met	Lys 1705	Asn	Met	Ala	Lys	Gly 1710	Glu	Ser	Leu
Met	Gly 1715	Glu	٧a٦	Аlа	Thr	Asp 1720	Trp	Met	Asp	Thr	Glu 1725	Cys	Pŗo	Glu
Αla	Lys 1730	Arg	Leu	Lys	٧a٦	G]u 1735	Glu	Pro	GТу	Met	Gly 1740	Ala	Glu	Glu
Αla	Val 1745	Asp	Cys	Arg	Gln	Trp 1750	Thr	Gln	His	His	Leu 1755	val	Аlа	Аlа
Asp	Ile 1760	Arg	val	Ala	Pro	Ala 1765	Met	Ala	Leu	Thr	Pro 1770	Pro	Gln	GТу
Asp	Ala 1775	Asp	Αla	Asp	σΊу	Met 1780	Asp	val	Asn	٧a٦	Arg 1785	GТу	Pro	Asp
Glу	Phe 1790	Thr	Pro	Leu	Met	Leu 1795	Ala	Ser	Phe	Cys	Gly 1800	GТу	Ala	Leu
Glu	Pro 1805	Met	Pro	Thr	Glu	Glu 1810	Asp	Glu	Ala	Asp	Asp 1815	Thr	ser	Ala
Ser	Ile 1820	Ile	ser	Asp	Leu	Ile 1825	Cys	Gln	Gly	Αla	Gln 1830	Leu	GТу	Ala
Arg	Thr 1835	Asp	Arg	Thr	Ġlу	Glu 1840	Thr	Ala	Leu	нis	Leu 1845	Ala	Αla	Arg
Tyr	Ala 1850	Arg	Ala	Asp	ΑΊa	д1а 1855	Lys	Arg	Leu	Leu	Asp 1860	Αla	Glу	Ala

Asp	Thr 1865		i Āla	ı Glı	ı Ast	ніs 1870		· Gly	⁄ Arg	Thr	Pro 1875		His	Thr
Αla	Val 1880		· Ala	ı Ası	Ala	Gln 1885	Gly	⁄ ∨al	Phe	Gln	Ile 1890		Ile	Arg
Asn	Arg 1895		Thr	. Ast	Leu	1 Asp 1900	Ala	Arg	Met	Ala	Asp 1905	Glу	Ser	Thr
Αla	Leu 1910	Ile	Leu	Ala	ı Ala	Arg 1915	Leu	Ala	٧a٦	Glu	Gly 1920	Met	Val	Glu
Glu	Leu 1925		Ala	Ser	His	Ala 1930		۷al	Asn	Αla	Val 1935		Glu	Leu
Gly	Lys 1940		Ala	Leu	His	Trp 1945	Ala	Ala	Аlа	Val	Asn 1950	Asn	val	Glu
Αla	Thr 1955		Аlа	Leu	Leu	Lys 1960	Asn	Gly	Αla	Asn	Lys 1965	Asp	Met	Gln
Asp	Ser 1970		Glu	Glu	Thr	Pro 1975	Leu	Phe	Leu	Аlа	Ala 1980	Arg	Glu	Gly
Ser	Tyr 1985		Αla	Αla	Lys	Leu 1990	Leu	Leu	Asp	нis	Phe 1995	ΑΊа	Asn	Arg
Glu	Ile 2000	Thr	Asp	ніѕ	Leu	Asp 2005	Arg	Leu	Pro	Arg	Asp 2010	val	Ala	Gln
Glu	Arg 2015	Leu	His	Gln	Asp	Ile 2020	val	Arg	Leu	Leu	Asp 2025	Gln	Pro	Ser
Gly	Pro 2030	Arg	Ser	Pro	Pro	G]y 2035	Pro	ніѕ	Gly	Leu	G]y 2040	Pro	Leu	Leu
Cys	Pro 2045	Pro	Glу	Αla	Phe	Leu 2050	Pro	Gly	Leu	Lys	A7a 2055	ĄТа	Gln	Ser
GЈу	ser 2060	Lys	Lys	Ser	Arg	Arg 2065	Pro	Pro	GЈу	Lys	Ala 2070	Glу	Leu	Glу
Pro	G]n 2075	GТу	Pro	Arg	Glу	Arg 2080	Gly	Lys	Lys	Leu	Thr 2085	Leu	Ala	Cys
Pro	Gly 2090	Pro	Leu	Αla	Asp	Ser 2095	Ser	Val	Thr	Leu	Ser 2100	Pro	Val	Asp
Ser	Leu 2105	Asp	Ser	Pro	Arg	Pro 2110	Phe	Gly	Gly	Pro	Pro 2115	Ala	Ser	Pro

Gly Gly Phe Pro Leu Glu Gly Pro Tyr Ala Ala Ala Thr Ala Thr 2120 2130

Ala Val Ser Leu Ala Gln Leu Gly Gly Pro Gly Arg Ala Gly Leu 2135 2140 2145

Gly Arg Gln Pro Pro Gly Gly Cys Val Leu Ser Leu Gly Leu Leu 2150 2160

Asn Pro Val Ala Val Pro Leu Asp Trp Ala Arg Leu Pro Pro Pro

Ala Pro Pro Gly Pro Ser Phe Leu Leu Pro Leu Ala Pro Gly Pro 2190

Gln Leu Leu Asn Pro Gly Thr Pro Val Ser Pro Gln Glu Arg Pro 2195 2200 2205

Pro Pro Tyr Leu Ala Val Pro Gly His Gly Glu Glu Tyr Pro Val 2210 2215 2220

Ala Gly Ala His Ser Ser Pro Pro Lys Ala Arg Phe Leu Arg Val 2225 2230 2235

Pro Ser Glu His Pro Tyr Leu Thr Pro Ser Pro Glu Ser Pro Glu 2240 2245 2250

His Trp Ala Ser Pro Ser Pro Pro Ser Leu Ser Asp Trp Ser Glu 2255 2260 2265

Ser Thr Pro Ser Pro Ala Thr Ala Thr Gly Ala Met Ala Thr Thr 2270 2275 2280

Thr Gly Ala Leu Pro Ala Gln Pro Leu Pro Leu Ser Val Pro Ser

Ser Leu Ala Gln Ala Gln Thr Gln Leu Gly Pro Gln Pro Glu Val 2300 2305 2310

Thr Pro Lys Arg Gln Val Leu Ala 2315 2320

<210> 20 <211> 6836

<212> DNA

<213> Homo sapiens

<220>

misc_feature

<221> <223> Notch-4

<400> 20

agacgtgagg	cttgcagcag	gccgaggagg	39467A.txt aagaagaggg		cagaggaggt	60
ggctcctgcc	ccagtgagag	ctctgagggt	ccctgcctga	agagggacag	ggactggggc	120
ttggagaagg	ggctgtggaa	tgcagccccc	ttcactgctg	ctgctgctgc	tgctgctgct	180
gctatgtgtc	tcagtggtca	gacccagagg	gctgctgtgt	gggagtttcc	cagaaccctg	240
tgccaatgga	ggcacctgcc	tgagcctgtc	tctgggacaa	gggacctgcc	agtgtgcccc	300
tggcttcctg	ggtgagacgt	gccagtttcc	tgacccctgc	cagaacgccc	agctctgcca	360
aaatggaggc	agctgccaag	ccctgcttcc	cgctccccta	gggctcccca	gctctccctc	420
tccattgaca	cccagcttct	tgtgcacttg	cctccctggc	ttcactggtg	agagatgcca	480
ggccaagctt	gaagaccctt	gtcctccctc	cttctgttcc	aaaaggggcc	gctgccacat	540
ccaggcctcg	ggccgcccac	agtgctcctg	catgcctgga	tggacaggtg	agcagtgcca	600
gcttcgggac	ttctgttcag	ccaacccatg	tgttaatgga	ggggtgtgtc	tggccacgta	660
ccccagatc	cagtgccact	gcccaccggg	cttcgagggc	catgcctgtg	aacgtgatgt	720
caacgagtgc	ttccaggacc	caggaccctg	ccccaaaggc	acctcctgcc	ataacaccct	780.
gggctccttc	cagtgcctct	gccctgtggg	gcaggagggt	ccacgttgtg	agctgcgggc	840
aggaccctgc	cctcctaggg	gctgttcgaa	tgggggcacc	tgccagctga	tgccagagaa	900
agactccacc	tttcacctct	gcctctgtcc	cccaggtttc	ataggcccgg	gctgtgaggt	960
gaatccagac	aactgtgtca	gccaccaatg	tcagaatggg	ggcacttgcc	aggatgggct	1020
ggacacctac	acctgcctct	gcccagaaac	ctggacaggc	tgggactgct	ccgaagatgt	1080
ggatgagtgt	gaggcccagg	gtcccctca	ctgcagaaac	gggggcacct	gccagaactc	1140
tgctggtagc	tttcactgcg	tgtgtgtgag	tggctggggg	ggcacaagct	gtgaggagaa	1200
cctggatgac	tgtattgctg	ccacctgtgc	cccgggatcc	acctgcattg	accgggtggg	1260
ctctttctcc	tgcctctgcc	cacctggacg	cacaggactc	ctgtgccact	tggaagacat	1320
gtgtctgagc	cagccgtgcc	atggggatgc	ccaatgcagc	accaaccccc	tcacaggctc	1380
cacactctgc	ctgtgtcagc	ctggctattc	ggggcccacc	tgccaccagg	acctggacga	1440
gtgtctgatg	gcccagcaag	gcccaagtcc	ctgtgaacat	ggcggttcct	gcctcaacac	1500
tcctggctcc	ttcaactgcc	tctgtccacc	tggctacaca	ggctcccgtt	gtgaggctga	1560
tcacaatgag	tgcctctccc	agccctgcca.	cccaggaagc	acctgtctgg	acctacttgc	1620
caccttccac	tgcctctgcc	cgccaggctt	agaagggcag	ctctgtgagg	tggagaccaa	1680
cgagtgtgcc	tcagctccct	gcctgaacca	cgcggattgc	catgacctgc	tcaacggctt	1740
ccagtgcatc ·	tgcctgcctg	gattctccgg	cacccgatgt	gaggaggata	tcgatgagtg	1800
cagaagctct	ccctgtgcca	atggtgggca	gtgccaggac	cagcctggag	ccttccactg	1860
caagtgtctc						1920
tgacccatgt						1980
cccctctggt						2040

39467A.txt.txt gcccaagcag atatgtaagg accagaaaga caaggccaac tgcctctgtc ctgatggaag 2100 ccctggctgt gccccacctg aggacaactg cacctgccac cacgggcact gccagagatc 21.60 ctcatgtgtg tgtgacgtgg gttggacggg gccagagtgt gaggcagagc tagggggctq 2220 catctctgca ccctgtgccc atggggggac ctgctacccc cagccctctg gctacaactg 2280 cacctgccct acaggctaca caggacccac ctgtagtgag gagatgacag cttgtcactc 2340 agggccatgt ctcaatggcg gctcctgcaa ccctagccct ggaggctact actgcacctq 2400 ccctccaagc cacacagggc cccagtgcca aaccagcact gactactgtg tgtctgccc 2460 gtgcttcaat gggggtacct gtgtgaacag gcctggcacc ttctcctgcc tctgtgccat 2520 gggcttccag ggcccgcgct gtgagggaaa gctccgccc agctgtgcag acagcccctg 2580 taggaatagg gcaacctgcc aggacagccc tcagggtccc cgctgcctct gccccactgg 2640 ctacaccgga ggcagctgcc agactctgat ggacttatgt gcccagaagc cctgcccacg 2700 caattcccac tgcctccaga ctgggccctc cttccactgc ttgtgcctcc agggatggac 2760 cgggcctctc tgcaaccttc cactgtcctc ctgccagaag gctgcactga gccaaggcat 2820 agacgtctct tccctttgcc acaatggagg cctctgtgtc gacagcggcc cctcctattt 2880 2940 ctgccactgc ccccctggat tccaaggcag cctgtgccag gatcacgtga acccatgtga gtccaggcct tgccagaacg gggccacctg catggcccag cccagtgggt atctctgcca 3000 3060 gtgtgcccca ggctacgatg gacagaactg ctcaaaggaa ctcgatgctt gtcagtccca accctgtcac aaccatggaa cctgtactcc caaacctgga ggcttccact gtgcctgccc 3120 3180 tccaggcttt gtggggctac gctgtgaggg agacgtggac gagtgtctgg accagccctg 3240 ccaccccaca ggcactgcag cctgccactc tctggccaat gccttctact gccagtgtct 3300 gcctggacac acaggccagt ggtgtgaggt ggagatagac ccctgccaca gccaaccctg ctttcatgga gggacctgtg aggccacagc aggatcaccc ctgggtttca tctgccactg 3360 3420 ccccaagggt tttgaaggcc ccacctgcag ccacagggcc ccttcctgcg gcttccatca 3480 ctgccaccac ggaggcctgt gtctgccctc ccctaagcca ggcttcccac cacgctgtgc 3540 ctgcctcagt ggctatgggg gtcctgactg cctgacccca ccagctccta aaggctgtgg 3600 ccctccctcc ccatgcctat acaatggcag ctgctcagag accacgggct tggggggccc aggetttega tgeteetgee eteacagete tecagggeee eggtgteaga aacceggage 3660 3720 caaggggtgt gagggcagaa gtggagatgg ggcctgcgat gctggctgca gtggcccggg 3780 aggaaactgg gatggagggg actgctctct gggagtccca gacccctgga agggctgccc 3840 ctcccactct cggtgctggc ttctcttccg ggacgggcag tgccacccac agtgtgactc tgaagagtgt ctgtttgatg gctacgactg tgagacccct ccagcctgca ctccagccta 3900 tgaccagtac tgccatgatc acttccacaa cgggcactgt gagaaaggct gcaacactgc 3960 4020 agagtgtggc tgggatggag gtgactgcag gcctgaagat ggggacccag agtgggggcc ctccctggcc ctgctggtgg tactgagccc cccagcccta gaccagcagc tgtttgccct 4080

	•		39467A.txt			
ggcccgggtg	ctgtccctga	ctctgagggt	aggactctgg	gtaaggaagg	atcgtgatgg	4140
cagggacatg	gtgtacccct	atcctggggc	ccgggctgaa	gaaaagctag	gaggaactcg	4200
ggaccccacc	tatcaggaga	gagcagcccc	tcaaacacag	cccctgggca	aggagaccga	4260
ctccctcagt	gctgggtttg	tggtggtcat	gggtgtggat	ttgtcccgct	gtggccctga	4320
ccacccggca	tcccgctgtc	cctgggaccc	tgggcttcta	ctccgcttcc	ttgctgcgat	4380
ggctgcagtg	ggagccctgg	agcccctgct	gcctggacca	ctgctggctg	tccaccctca	4440
tgcagggacc	gcaccccctg	ccaaccagct	tccctggcct	gtgctgtgct	ccccagtggc	4500
cggggtgatt	ctcctggccc	taggggctct	tctcgtcctc	cagctcatcc	ggcgtcgacg	4560
ccgagagcat	ggagctctct	ggctgccccc	tggtttcact	cgacggcctc	ggactcagtc	4620
agctccccac	cgacgccggc	ccccactagg	cgaggacagc	attggtctca	aggcactgaa	4680·
gccaaaggca	gaagttgatg	aggatggagt	tgtgatgtgc	tcaggccctg	aggagggaga	4740
ggaggtgggc	caggctgaag	aaacaggccc	accctccacg	tgccagctct	ggtctctgag	4800
tggtggctgt	ggggcgctcc	ctcaggcagc	catgctaact	cctccccagg	aatctgagat	4860
ggaagcccct	gacctggaca	cccgtggacc	tgatggggtg	acacccctga	tgtcagcagt	4920
ttgctgtggg	gaagtacagt	ccgggacctt	ccaaggggca	tggttgggat	gtcctgagcc	4980
ctgggaacct	ctgctggatg	gaggggcctg	tccccaggct	cacaccgtgg	gcactgggga	5040
gacccccctg	cacctggctg	cccgattctc	ccggccaacc	gctgcccgcc	gcctccttga	5100
ggctggagcc	aaccccaacc	agccagaccg	ggcagggcgc	acaccccttc	atgctgctgt	5160
ggctgctgat	gctcgggagg	tctgccagct	tctgctccgt	agcagacaaa	ctgcagtgga	5220
cgctcgcaca	gaggacggga	ccacaccctt	gatgctggct	gccaggctgg	cggtggaaga	5280
cctggttgaa	gaactgattg	cagcccaagc	agacgtgggg	gccagagata	aatgggggaa	5340
aactgcgctg	cactgggctg	ctgccgtgaa	caacgcccga	gccgcccgct	cgcttctcca	5400
ggccggagcc	gataaagatg	cccaggacaa	cagggagcag	acgccgctat	tcctggcggc	5460
gcgggaagga	gcggtggaag	tagcccagct	actgctgggg	ctgggggcag	cccgagagct	5520
gcgggaccag	gctgggctag	cgccggcgga	cgtcgctcac	caacgtaacc	actgggatct	5580
gctgacgctg	ctggaagggg	ctgggccacc	agaggcccgt	cacaaagcca	cgccgggccg	5640
cgaggctggg	cccttcccgc	gcgcacggac	ggtgtcagta	agcgtgcccc	cgcatggggg	5700
cggggctctg	ccgcgctgcc	ggacgctgtc	agccggagca	ggccctcgtg	ggggcggagc	5760
ttgtctgcag	gctcggactt	ggtccgtaga	cttggctgcg	cgggggggcg	gggcctattc	5820
tcattgccgg	agcctctcgg	gagtaggagc	aggaggaggc	ccgacccctc	gcggccgtag	5880
gttttctgca	ggcatgcgcg	ggcctcggcc	caaccctgcg	ataatgcgag	gaagatacgg	5940
	gggcgcggag		,			6000
	tgcggttctg		•			6060
	ggatcacctc					6120

39467A.txt.txt 6180 aaaccaagga ggagagggta aaaaatagaa gaatacatgg tagggaggaa ttccaaaaat qattacccat taaaaggcag gctggaaggc cttcctggtt ttaagatgga tcccccaaaa 6240 6300 tgaagggttg tgagtttagt ttctctccta aaatgaatgt atgcccacca gagcagacat cttccacgtg gagaagctgc agctctggaa agagggttta agatgctagg atgaggcagg 6360 cccagtcctc ctccagaaaa taagacaggc cacaggaggg cagagtggag tggaaatacc 6420 cctaagttgg aaccaagaat tgcaggcata tgggatgtaa gatgttcttt cctatatatg 6480 gtttccaaag ggtgccccta tgatccattg tccccactgc ccacaaatgg ctgacaaata 6540 6600 tttattgggc acctactatg tgccaggcac tgtgtaggtg ctgaaaagtg gccaagggcc 6660 acccccgctg atgactcctt gcattccctc ccctcacaac aaagaactcc actgtgggga tqaaqcgctt cttctagcca ctgctatcgc tatttaagaa ccctaaatct gtcacccata 6720 6780 6836

<210> 21 <211> 2002

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Notch-4

<400> 21

Val Ser Val Val Arg Pro Arg Gly Leu Leu Cys Gly Ser Phe Pro Glu 20 25 30

Pro Cys Ala Asn Gly Gly Thr Cys Leu Ser Leu Gly Gln Gly 35 40 45

Thr Cys Gln Cys Ala Pro Gly Phe Leu Gly Glu Thr Cys Gln Phe Pro 50 60

Asp Pro Cys Gln Asn Ala Gln Leu Cys Gln Asn Gly Gly Ser Cys Gln 65 70 75 80

Ala Leu Leu Pro Ala Pro Leu Gly Leu Pro Ser Ser Pro Ser Pro Leu 85 90 95

Thr Pro Ser Phe Leu Cys Thr Cys Leu Pro Gly Phe Thr Gly Glu Arg 100 105 110

Cys Gln Ala Lys Leu Glu Asp Pro Cys Pro Pro Ser Phe Cys Ser Lys 115 120 125

Arg Gly Arg Cys His Ile Gln Ala Ser Gly Arg Pro Gln Cys Ser Cys 130 135 140 Met Pro Gly Trp Thr Gly Glu Gln Cys Gln Leu Arg Asp Phe Cys Ser 145 150 155 160 Ala Asn Pro Cys Val Asn Gly Gly Val Cys Leu Ala Thr Tyr Pro Gln 165 170 175 Ile Gln Cys His Cys Pro Pro Gly Phe Glu Gly His Ala Cys Glu Arg 180 185 190 Asp Val Asm Glu Cys Phe Gln Asp Pro Gly Pro Cys Pro Lys Gly Thr 195 200 205 Ser Cys His Asn Thr Leu Gly Ser Phe Gln Cys Leu Cys Pro Val Gly 210 220 Gln Glu Gly Pro Arg Cys Glu Leu Arg Ala Gly Pro Cys Pro Pro Arg 225 230 235 240 Gly Cys Ser Asn Gly Gly Thr Cys Gln Leu Met Pro Glu Lys Asp Ser 245 250 255 Thr Phe His Leu Cys Leu Cys Pro Pro Gly Phe Ile Gly Pro Gly Cys 260 265 270 Glu Val Asn Pro Asp Asn Cys Val Ser His Gln Cys Gln Asn Gly Gly 275 280 285 Thr Cys Gln Asp Gly Leu Asp Thr Tyr Thr Cys Leu Cys Pro Glu Thr 290 295 300 Trp Thr Gly Trp Asp Cys Ser Glu Asp Val Asp Glu Cys Glu Ala Gln 305 310 315 Gly Pro Pro His Cys Arg Asn Gly Gly Thr Cys Gln Asn Ser Ala Gly 325 330 Ser Phe His Cys Val Cys Val Ser Gly Trp Gly Gly Thr Ser Cys Glu 340 345 350 Glu Asn Leu Asp Asp Cys Ile Ala Ala Thr Cys Ala Pro Gly Ser Thr 355 360 365 Cys Ile Asp Arg Val Gly Ser Phe Ser Cys Leu Cys Pro Pro Gly Arg 370 375 380 Thr Gly Leu Leu Cys His Leu Glu Asp Met Cys Leu Ser Gln Pro Cys 385 390 395

His Gly Asp Ala Gln Cys Ser Thr Asn Pro Leu Thr Gly Ser Thr Leu Cys Leu Cys Gln Pro Gly Tyr Ser Gly Pro Thr Cys His Gln Asp Leu 420 425 430 Asp Glu Cys Leu Met Ala Gln Gln Gly Pro Ser Pro Cys Glu His Gly 435 440 445 Gly Ser Cys Leu Asn Thr Pro Gly Ser Phe Asn Cys Leu Cys Pro Pro 450 460 Gly Tyr Thr Gly Ser Arg Cys Glu Ala Asp His Asn Glu Cys Leu Ser 465 470 475 480 Gln Pro Cys His Pro Gly Ser Thr Cys Leu Asp Leu Leu Ala Thr Phe 485 490 495 His Cys Leu Cys Pro Pro Gly Leu Glu Gly Gln Leu Cys Glu Val Glu
500 505 510 Thr Asn Glu Cys Ala Ser Ala Pro Cys Leu Asn His Ala Asp Cys His 515 520 525 Asp Leu Leu Asn Gly Phe Gln Cys Ile Cys Leu Pro Gly Phe Ser Gly 530 540 Thr Arg Cys Glu Glu Asp Ile Asp Glu Cys Arg Ser Ser Pro Cys Ala 545 550 555 Asn Gly Gly Gln Cys Gln Asp Gln Pro Gly Ala Phe His Cys Lys Cys
565 570 575 Leu Pro Gly Phe Glu Gly Pro Arg Cys Gln Thr Glu Val Asp Glu Cys
580 585 590 Leu Ser Asp Pro Cys Pro Val Gly Ala Ser Cys Leu Asp Leu Pro Gly 605 Ala Phe Phe Cys Leu Cys Pro Ser Gly Phe Thr Gly Gln Leu Cys Glu 610 615 620 Val Pro Leu Cys Ala Pro Asn Leu Cys Gln Pro Lys Gln Ile Cys Lys 625 630 635 640 Asp Gln Lys Asp Lys Ala Asn Cys Leu Cys Pro Asp Gly Ser Pro Gly 645 650 655 Cys Ala Pro Pro Glu Asp Asn Cys Thr Cys His His Gly His Cys Gln
660 665 670

Arg Ser Ser Cys Val Cys Asp Val Gly Trp Thr Gly Pro Glu Cys Glu 675 680 685 Ala Glu Leu Gly Gly Cys Ile Ser Ala Pro Cys Ala His Gly Gly Thr 690 695 700 Cys Tyr Pro Gln Pro Ser Gly Tyr Asn Cys Thr Cys Pro Thr Gly Tyr 705 710 715 720 Thr Gly Pro Thr Cys Ser Glu Glu Met Thr Ala Cys His Ser Gly Pro 725 730 735 Cys Leu Asn Gly Gly Ser Cys Asn Pro Ser Pro Gly Gly Tyr Tyr Cys
740 745 750 Thr Cys Pro Pro Ser His Thr Gly Pro Gln Cys Gln Thr Ser Thr Asp
755 760 765 Tyr Cys Val Ser Ala Pro Cys Phe Asn Gly Gly Thr Cys Val Asn Arg 770 775 780 Pro Gly Thr Phe Ser Cys Leu Cys Ala Met Gly Phe Gln Gly Pro Arg 785 790 795 800 Cys Glu Gly Lys Leu Arg Pro Ser Cys Ala Asp Ser Pro Cys Arg Asn 810 815 Arg Ala Thr Cys Gln Asp Ser Pro Gln Gly Pro Arg Cys Leu Cys Pro 820 825 830 Thr Gly Tyr Thr Gly Gly Ser Cys Gln Thr Leu Met Asp Leu Cys Ala 835 840 845 Gln Lys Pro Cys Pro Arg Asn Ser His Cys Leu Gln Thr Gly Pro Ser 850 855 Phe His Cys Leu Cys Leu Gln Gly Trp Thr Gly Pro Leu Cys Asn Leu 865 870 875 880 Pro Leu Ser Ser Cys Gln Lys Ala Ala Leu Ser Gln Gly Ile Asp Val 885 890 895 Ser Ser Leu Cys His Asn Gly Gly Leu Cys Val Asp Ser Gly Pro Ser 900 905 Tyr Phe Cys His Cys Pro Pro Gly Phe Gln Gly Ser Leu Cys Gln Asp 915 920 925 His Val Asn Pro Cys Glu Ser Arg Pro Cys Gln Asn Gly Ala Thr Cys 930 935 940

Met Ala Gln Pro Ser Gly Tyr Leu Cys Gln Cys Ala Pro Gly Tyr Asp 950 955 960

Gly Gln Asn Cys Ser Lys Glu Leu Asp Ala Cys Gln Ser Gln Pro Cys 965 970 975

His Asn His Gly Thr Cys Thr Pro Lys Pro Gly Gly Phe His Cys Ala 980 985 990

Cys Pro Pro Gly Phe Val Gly Leu Arg Cys Glu Gly Asp Val Asp Glu 995 1000 1005

Cys Leu Asp Gln Pro Cys His Pro Thr Gly Thr Ala Ala Cys His 1010 1015 1020

Ser Leu Ala Asn Ala Phe Tyr Cys Gln Cys Leu Pro Gly His Thr 1025 1030 1035

Gly Gln Trp Cys Glu Val Glu Ile Asp Pro Cys His Ser Gln Pro 1040 1045 1050

Cys Phe His Gly Gly Thr Cys Glu Ala Thr Ala Gly Ser Pro Leu 1055 1060 1065

Gly Phe Ile Cys His Cys Pro Lys Gly Phe Glu Gly Pro Thr Cys 1070 1075 1080

Ser His Arg Ala Pro Ser Cys Gly Phe His His Cys His His Gly 1085 1090 1095

Gly Leu Cys Leu Pro Ser Pro Lys Pro Gly Phe Pro Pro Arg Cys 1100 1110

Ala Cys Leu Ser Gly Tyr Gly Gly Pro Asp Cys Leu Thr Pro Pro 1115 1120 1125

Ala Pro Lys Gly Cys Gly Pro Pro Ser Pro Cys Leu Tyr Asn Gly 1130 1135 1140

Ser Cys Ser Glu Thr Thr Gly Leu Gly Gly Pro Gly Phe Arg Cys 1145 1150 1155

Ser Cys Pro His Ser Ser Pro Gly Pro Arg Cys Gln Lys Pro Gly 1160 1165 1170

Ala Lys Gly Cys Glu Gly Arg Ser Gly Asp Gly Ala Cys Asp Ala 1175 1180 1185

Gly Cys Ser Gly Pro Gly Gly Asn Trp Asp Gly Gly Asp Cys Ser 1190 1195 1200

Leu	Gly 1205	Val	Pro	Asp	Pro	Trp 1210	Lys	Gly	Cys	Pro	Ser 1215	His	Ser	Arg
Cys	Trp 1220	Leu	Leu	Phe	Arg	Asp 1225	Gly	Gln	Cys	His	Pro 1230	Gln	Cys	Asp
Ser	Glu 1235	Glu	Cys	Leu	Phe	Asp 1240	GТу	Tyr	Asp	Cys	Glu 1245	Thr	Pro	Pro
Аlа	Cys 1250		Pro	Αla	Tyr	Asp 1255	GÌn	Tyr	Cys	His	Asp 1260	His	Phe	His
Asn	Glý 1265		Ċys	Glu	Lys	Gly 1270	Cys	Asn	Thr	۸la	Glu 1275	Cys	Gly	Trp
Asp	Gly 1280		Asp	Cys	Arg	Pro 1285	Glu	Asp	Gly	Asp	Pro 1290	Glu	Trp	GÌу
Pro	Ser 1295	Leu	ΑΊа	Leu	Leu	Val 1300	۷al	Leu	ser	Pro	Pro 1305	Ala	Leu	Asp
GÌn	G]n 1310	Leu	Phe	Αla	Leu	Ala 1315	Arg	٧a٦	Leu	ser	Leu 1320	Thr	Leu	Arg
val	Gly 1325	Leu	Trp	val	Arg	Lys 1330	Asp	Arg	Asp	Glу	Arg 1335	Asp	Met	Val
туг	Pro 1340	Tyr	Pro	Glу	ΑΊa	Arg 1345	Аlа	Ģlu	Glu	Lys	Leu 1350	Glу	GТу	Thr
Arg	Asp 1355	Pro	Thr	Tyr	Gln	Glu 1360	Arg	Аla	Аlа	Pro	Gln 1365	Thr	G∏n	Pro
Leu	Gly 1370	Lys	Glu	Thr	Asp	Ser 1375	Leu	Ser	Ala	Gly	Phe 1380	val	val	٧a٦
Met	Gly 1385	۷al	Asp	Leu	Ser	Arg 1390	Cys	Gly	Pro	Asp	Ніs 1395	Pro	Ala	Ser
Arg	Cys 1400	Pro	Trp	Asp	Pro	Gly 1405	Leu	Leu	Leu	Arg	Phe 1410	Leu	Ala	Ala
Met	Ala 1415	Ala	۷al.	Gly	Ala	Leu 1420	Glu	Pro	Leu	Leu	Pro 1425	Gly	Pro	Leu
Leu	Ala 1430	val	нis	Pro	His	Ala 1435	Gly	Thr	Ala	Pro	Pro 1440	Ala	Asn	Gln
Leu	Pro 1445	Trp	Pro	٧a٦	Leu	Cys 1450	Ser	Pro	۷al	Ala	Gly 1455	۷a٦	Ile	Leu

Leu Ala Leu Gly Ala Leu Leu Val Leu Gln Leu Ile Arg Arg Arg 1460 1465 1470

Arg Arg Glu His Gly Ala Leu Trp Leu Pro Pro Gly Phe Thr Arg 1475 1480 1485

Arg Pro Arg Thr Gln Ser Ala Pro His Arg Arg Pro Pro Leu 1490 1500

Gly Glu Asp Ser Ile Gly Leu Lys Ala Leu Lys Pro Lys Ala Glu 1505 1510 1515

Val Asp Glu Asp Gly Val Val Met Cys Ser Gly Pro Glu Glu Gly 1520 1530

Glu Glu Val Gly Gln Ala Glu Glu Thr Gly Pro Pro Ser Thr Cys 1535 1540 1545

Gln Leu Trp Ser Leu Ser Gly Gly Cys Gly Ala Leu Pro Gln Ala 1550 1560

Ala Met Leu Thr Pro Pro Gln Glu Ser Glu Met Glu Ala Pro Asp 1565 1570 1575

Leu Asp Thr Arg Gly Pro Asp Gly Val Thr Pro Leu Met Ser Ala 1580 1585 1590

Val Cys Cys Gly Glu Val Gln Ser Gly Thr Phe Gln Gly Ala Trp 1595 1600 1605

Leu Gly Cys Pro Glu Pro Trp Glu Pro Leu Leu Asp Gly Gly Ala 1610 1615 1620

Cys Pro Gln Ala His Thr Val Gly Thr Gly Glu Thr Pro Leu His 1625 1630 1635

Leu Ala Ala Arg Phe Ser Arg Pro Thr Ala Ala Arg Arg Leu Leu 1640 1650

Glu Ala Gly Ala Asn Pro Asn Gln Pro Asp Arg Ala Gly Arg Thr 1655 1660 1665

Pro Leu His Ala Ala Val Ala Ala Asp Ala Arg Glu Val Cys Gln 1670 1680

Leu Leu Arg Ser Arg Gln Thr Ala Val Asp Ala Arg Thr Glu 1685 1690 1695

Asp Gly Thr Thr Pro Leu Met Leu Ala Ala Arg Leu Ala Val Glu 1700 1705 1710

											-			
Asp	Leu 1715	Val	Glu	Glu	Leu	Ile 1720	Αla	Ala	Gln	Ala	Asp 1725	Val	Glу	Ala
Arg	Asp 1730	Lys	Trp	GЈу	Lys	Thr 1735	Ala	Leu	His	Trp	Ala 1740	Ala	Ala	val
Asn	Asn 1745	Аlа	Arg	Αla	Ala	Arg 1750	Ser	Leu	Leu	Gln	Ala 1755	Glу	Ala	Asp
Lys	Asp 1760	Ala	Gln	Asp	Asn	Arg 1765	Glu	Gln	Thr	Pro	Leu 1770	Phe	Leu	Ala
Аlа	Arg 1775	Glu	Glу	Ala	٧a٦	Glu ⁻ 1780	∨al	Ala	Gln	Leu ⁻	Leu 1785	Leu	Glу	Leu
GТу	Ala 1790	Ala	Arg	Glu	Leu	Arg 1795	Asp	Gln	Ala	Glу	Leu 1800	Ala	Pro	Аlа
Asp	val 1805	Ala	нis	Gln	Arg	Asn 1810	His	Тгр	Asp	Leu	Leu 1815	Thr	Leu	Leu
GTu	Gly 1820	Αla	GТу	Pro	Pro	Glu 1825	Ala	Arg	нis	Lys	Ala 1830	Thr	Pro	Gly
Arg	G]u 1835	Αla	Gly	Pro	Phe	Pro 1840	Arg	Αla	Arg	Thr	val 1845	Ser	۷al	ser
۷al	Pro 1850	Pro	His	GТу	GТу	Gly 1855	Ala	Leu	Pro	Arg	Cys 1860	Arg	Thr	Leu
Ser	Ala 1865	Glу	Αla	GТу	Pro	Arg 1870	Glу	Gly	Glу	Αla	Cys 1875	Leu	Gln	Alа
Arg	Thr 1880	Тгр	Ser	٧a٦	Asp	Leu 1885	Аlа	Αla	Arg	Gly	Gly 1890	Gly	Ala	Tyr
Ser	Нis 1895	Cys	Arg	ser	Leu	Ser 1900	Glу	val	Gly	Ala	Gly 1905	Gly	Gly	Pro
Thr	Pro 1910	Arg	Gly	Arg	Arg	Phe 1915	Ser	Ala	Gly	Met	Arg 1920	Gly	Pro	Arg
Pro	Asn 1925	Pro	Αĺα	Ile	Met	Arg 1930	GЈу	Arg	Tyr	Gly	val 1935	Ala	Ala	Glу
Arg	Gly 1940	GТу	Arg	val	Ser	Thr 1945	Asp	Asp	Trp	Pro	Cys 1950	Asp	Trp	۷al
Ala	Leu 1955	Glу	Ala	Cys	Gly	ser 1960	Αla	Ser	Asn	Ile	Pro 1965	Ile	Pro	Pro

Pro Cys Leu Thr Pro Ser Pro Glu Arg Gly Ser Pro Gln Leu Asp 1970 1975 1980

Cys Gly Pro Pro Ala Leu Gln Glu Met Pro Ile Asn Gln Gly Gly 1985 1990 1995

Glu Gly Lys Lys 2000

<210> 22 <211> 5896 <212> DNA

<213> Homo sapiens

<220> <221> misc_feature <223> Jagged-1

<400> 22 ctgcggccgg cccgcgagct aggctgggtt tttttttttc tcccctccct ccccctttt 60 tccatgcagc tgatctaaaa gggaataaaa ggctgcgcat aatcataata ataaaagaag 120 180 qqqaqcqcga gagaaqgaaa qaaaqccggg aggtggaaga ggagggggag cgtctcaaag 240 aagcgatcag aataataaaa ggaggccggg ctctttgcct tctggaacgg gccgctcttg 300 aaagggcttt tgaaaagtgg tgttgttttc cagtcgtgca tgctccaatc ggcggagtat 360 attagagccg ggacgcggcg gccgcagggg cagcggcgac ggcagcaccg gcggcagcac 420 caqcqcqaac aqcaqcqqcq qcqtcccgag tgcccgcggc gcgcggcgca gcgatgcgtt ccccacggac gcgcggccgg tccgggcgcc ccctaagcct cctgctcgcc ctgctctgtg 480 ccctgcgagc caaggtgtgt ggggcctcgg gtcagttcga gttggagatc ctgtccatgc 540 600 agaacqtqaa cqqqqaqctg cagaacggga actgctgcgg cggcgcccgg aacccgggag 660 accgcaagtg cacccgcgac gagtgtgaca catacttcaa agtgtgcctc aaggagtatc agtcccgcgt cacggccggg gggccctgca gcttcggctc agggtccacg cctgtcatcg 720 ggggcaacac cttcaacctc aaggccagcc gcggcaacga ccgcaaccgc atcgtgctgc 780 ctttcagttt cgcctggccg aggtcctata cgttgcttgt ggaggcgtgg gattccagta 840 900 atgacaccgt tcaacctgac agtattattg aaaaggcttc tcactcgggc atgatcaacc ccagccggca gtggcagacg ctgaagcaga acacgggcgt tgcccacttt gagtatcaga 960 tccgcgtgac ctgtgatgac tactactatg gctttggctg caataagttc tgccgcccca 1020 1080 gagatgactt ctttggacac tatgcctgtg accagaatgg caacaaaact tgcatggaag gctggatggg ccccgaatgt aacagagcta tttgccgaca aggctgcagt cctaagcatg 1140 ggtcttgcaa actcccaggt gactgcaggt gccagtatgg ctggcaaggc ctgtactgtg 1200 1260 ataagtgcat cccacacccg ggatgcgtcc acggcatctg taatgagccc tggcagtgcc tctqtqagac caactggggc ggccagctct gtgacaaaga tctcaattac tgtgggactc 1320

39467A.txt.txt atcagccgtg tctcaacggg ggaacttgta gcaacacagg ccctgacaaa tatcagtgtt 1380 cctgccctga ggggtattca ggacccaact gtgaaattgc tgagcacgcc tgcctctctg 1440 atccctgtca caacagaggc agctgtaagg agacctccct gggctttgag tgtgagtgtt 1500 ccccaggctg gaccggcccc acatgctcta caaacattga tgactgttct cctaataact 1560 gttcccacgg gggcacctgc caggacctgg ttaacggatt taagtgtgtg tgccccccac 1620 aqtqqactgg gaaaacgtgc cagttagatg caaatgaatg tgaggccaaa ccttgtgtaa 1680 acgccaaatc ctgtaagaat ctcattgcca gctactactg cgactgtctt cccggctgga 1740 tgggtcagaa ttgtgacata aatattaatg actgccttgg ccagtgtcag aatgacgcct 1800 cctgtcggga tttggttaat ggttatcgct gtatctgtcc acctggctat gcaggcgatc 1860 actgtgagag agacatcgat gaatgtgcca gcaacccctg tttgaatggg ggtcactgtc 1920 1980 agaatgaaat caacagattc cagtgtctgt gtcccactgg tttctctgga aacctctgtc 2040 agctggacat cgattattgt gagcctaatc cctgccagaa cggtgcccag tgctacaacc 2100 gtgccagtga ctatttctgc aagtgccccg aggactatga gggcaagaac tgctcacacc tgaaagacca ctgccgcacg accccctgtg aagtgattga cagctgcaca gtggccatgg 2160 cttccaacga cacacctgaa ggggtgcggt atatttcctc caacgtctgt ggtcctcacg 2220 2280 qqaaqtqcaa qaqtcagtcg ggaggcaaat tcacctgtga ctgtaacaaa ggcttcacgg gaacatactg ccatgaaaat attaatgact gtgagagcaa cccttgtaga aacggtggca 2340 cttgcatcga tggtgtcaac tcctacaagt gcatctgtag tgacggctgg gagggggcct 2400 2460 actgtgaaac caatattaat gactgcagcc agaacccctg ccacaatggg ggcacgtgtc gcgacctggt caatgacttc tactgtgact gtaaaaatgg gtggaaagga aagacctgcc 2520 2580 actcacgtga cagtcagtgt gatgaggcca cgtgcaacaa cggtggcacc tgctatgatg agggggatgc ttttaagtgc atgtgtcctg gcggctggga aggaacaacc tgtaacatag 2640 cccgaaacag tagctgcctg cccaacccct gccataatgg gggcacatgt gtggtcaacg 2700 gcgagtcctt tacgtgcgtc tgcaaggaag gctgggaggg gcccatctgt gctcagaata 2760 ccaatgactg cagccctcat ccctgttaca acagcggcac ctgtgtggat ggagacaact 2820 2880 ggtaccggtg cgaatgtgcc ccgggttttg ctgggcccga ctgcagaata aacatcaatg 2940 aatgccagtc ttcaccttgt gcctttggag cgacctgtgt ggatgagatc aatggctacc ggtgtgtctg ccctccaggg cacagtggtg ccaagtgcca ggaagtttca gggagacctt 3000 3060 gcatcaccat ggggagtgtg ataccagatg gggccaaatg ggatgatgac tgtaatacct 3120 gccagtgcct gaatggacgg atcgcctgct caaaggtctg gtgtggccct cgaccttgcc 3180 tgctccacaa agggcacagc gagtgcccca gcgggcagag ctgcatcccc atcctggacg 3240 accagtgctt cgtccacccc tgcactggtg tgggcgagtg tcggtcttcc agtctccagc 3300 cggtgaagac aaagtgcacc tctgactcct attaccagga taactgtgcg aacatcacat ttacctttaa caaggagatg atgtcaccag gtcttactac ggagcacatt tgcagtgaat 3360

39467A.txt.txt tgaggaattt gaatattttg aagaatgttt ccgctgaata ttcaatctac atcgcttgcg 3420 agccttcccc ttcagcgaac aatgaaatac atgtqqccat ttctqctgaa qatatacqqq 3480 atgatgggaa cccgatcaag gaaatcactg acaaaataat cgatcttgtt agtaaacqtq 3540 atggaaacag ctcgctgatt gctgccgttg cagaagtaag agttcagagg cggcctctga 3600 agaacagaac agatttcctt gttcccttgc tgagctctgt cttaactgtg gcttggatct 3660 gttgcttggt gacggccttc tactggtgcc tgcggaagcg gcggaagccg ggcagccaca 3720 cacactCagc ctctgaggac aacaccacca acaacgtgcg ggagcagctg aaccagatca 3780 aaaaccccat tgagaaacat ggggccaaca cggtccccat caaggattac gagaacaaga 3840 actccaaaat gtctaaaata aggacacaca attctgaagt agaagaggac gacatggaca 3900 aacaccagca gaaagcccgg tttgccaagc agccggcgta tacgctggta gacagagaag 3960 agaagccccc caacggcacg ccgacaaaac acccaaactg gacaaacaaa caggacaaca 4020 gagacttgga aagtgcccag agcttaaacc gaatggagta catcgtatag cagaccgcgg 4080 gcactgccgc cgctaggtag agtctgaggg cttgtagttc tttaaactgt cgtgtcatac 4140 tcgagtctga ggccgttgct gacttagaat ccctgtgtta atttaagttt tgacaagctg 4200 gcttacactg gcaatggtag tttctgtggt tggctgggaa atcgagtgcc gcatctcaca 4260 gctatgcaaa aagctagtca acagtaccct ggttgtgtgt ccccttgcag ccgacacggt 4320 4380 ctcggatcag gctcccagga gcctgcccag cccctggtc tttgagctcc cacttctgcc 4440 agatgtccta atggtgatgc agtcttagat catagtttta tttatattta ttgactcttg 4500 agttgttttt gtatattggt tttatgatga cgtacaagta gttctgtatt tgaaagtgcc tttgcagctc agaaccacag caacgatcac aaatgacttt attatttatt tttttaattg 4560 4620 tatttttqtt gttqqqqqag gqqaqacttt gatgtcagca gttgctggta aaatgaagaa tttaaagaaa aaaatgtcaa aagtagaact ttgtatagtt atgtaaataa ttcttttta 4680 4740 ttaatcactg tgtatatttg atttattaac ttaataatca agagccttaa aacatcattc ctttttattt atatgtatgt gtttagaatt gaaggttttt gatagcattg taagcgtatg 4800 gctttatttt tttgaactct tctcattact tgttgcctat aagccaaaat taaggtgttt 4860 gaaaatagtt tattttaaaa caataggatg ggcttctgtg cccagaatac tgatggaatt 4920 ttttttgtac gacgtcagat gtttaaaaca ccttctatag catcacttaa aacacgtttt 4980 aaggactgac tgaggcagtt tgaggattag tttagaacag gtttttttgt ttgtttgttt 5040 tttgtttttc tgctttagac ttgaaaagag acaggcaggt gatctgctgc agagcagtaa 5100 5160 gggaacaagt tgagctatga cttaacatag ccaaaatgtg agtggttgaa tatgattaaa aatatcaaat taattqtgtg aacttggaag cacaccaatc tgactttgta aattctgatt 5220 tcttttcacc attcgtacat aatactgaac cacttgtaga tttgattttt tttttaatct 5280 actgcattta qqqaqtattc taataagcta gttgaatact tgaaccataa aatgtccagt 5340 aagatcactg tttagatttg ccatagagta cactgcctgc cttaagtgag gaaatcaaag 5400

39467A.txt.txt tqctattacg aagttcaaga tcaaaaaggc ttataaaaca gagtaatctt gttggttcac 5460 5520 cattgagacc gtgaagatac tttgtattgt cctattagtg ttatatgaac atacaaatgc atctttgatg tgttgttctt ggcaataaat tttgaaaagt aatatttatt aaatttttt 5580 gtatgaaaac atggaacagt gtggctcttc tgagcttacg tagttctacc ggctttgccg 5640 5700 tgtgcttctg ccaccctgct gagtctgttc tggtaatcgg ggtataatag gctctgcctg acagagggat ggaggaagaa ctgaaaggct tttcaaccac aaaactcatc tggagttctc 5760 5820 aaagacctgg ggctgctgtg aagctggaac tgcgggagcc ccatctaggg gagccttgat tcccttgtta ttcaacagca agtgtgaata ctgcttgaat aaacaccact ggattaatgg 5880 5896 aaaaaaaaa aaaaaa

<210> 23 <211> 1218 <212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Jagged-1

<400> 23

Met Arg Ser Pro Arg Thr Arg Gly Arg Ser Gly Arg Pro Leu Ser Leu 1 5 10 15

Leu Leu Ala Leu Leu Cys Ala Leu Arg Ala Lys Val Cys Gly Ala Ser 20 25 30

Gly Gln Phe Glu Leu Glu Ile Leu Ser Met Gln Asn Val Asn Gly Glu 35 40 45

Leu Gln Asn Gly Asn Cys Cys Gly Gly Ala Arg Asn Pro Gly Asp Arg 50 55 60

Lys Cys Thr Arg Asp Glu Cys Asp Thr Tyr Phe Lys Val Cys Leu Lys 65 70 75 80

Glu Tyr Gln Ser Arg Val Thr Ala Gly Gly Pro Cys Ser Phe Gly Ser 85 90 95

Gly Ser Thr Pro Val Ile Gly Gly Asn Thr Phe Asn Leu Lys Ala Ser 100 105 110

Arg Gly Asn Asp Arg Asn Arg Ile Val Leu Pro Phe Ser Phe Ala Trp 115 120 125

Pro Arg Ser Tyr Thr Leu Leu Val Glu Ala Trp Asp Ser Ser Asn Asp 130 135 140

Thr Val Gln Pro Asp Ser Ile Ile Glu Lys Ala Ser His Ser Gly Met

145 150

160

Ile Asn Pro Ser Arg Gln Trp Gln Thr Leu Lys Gln Asn Thr Gly Val 165 170 175 Ala His Phe Glu Tyr Gln Ile Arg Val Thr Cys Asp Asp Tyr Tyr 180 185 190 Gly Phe Gly Cys Asn Lys Phe Cys Arg Pro Arg Asp Asp Phe Phe Gly 200 205 His Tyr Ala Cys Asp Gln Asn Gly Asn Lys Thr Cys Met Glu Gly Trp 210 220 Met Gly Pro Glu Cys Asn Arg Ala Ile Cys Arg Gln Gly Cys Ser Pro 225 230 235 240 Lys His Gly Ser Cys Lys Leu Pro Gly Asp Cys Arg Cys Gln Tyr Gly
245 250 255 Trp Gln Gly Leu Tyr Cys Asp Lys Cys Ile Pro His Pro Gly Cys Val 260 265 270 His Gly Ile Cys Asn Glu Pro Trp Gln Cys Leu Cys Glu Thr Asn Trp 275 280 285 Gly Gly Gln Leu Cys Asp Lys Asp Leu Asn Tyr Cys Gly Thr His Gln 290 295 300 Pro Cys Leu Asn Gly Gly Thr Cys Ser Asn Thr Gly Pro Asp Lys Tyr 305 310 315 320 Gln Cys Ser Cys Pro Glu Gly Tyr Ser Gly Pro Asn Cys Glu Ile Ala 325 330 335 Glu His Ala Cys Leu Ser Asp Pro Cys His Asn Arg Gly Ser Cys Lys 340 345 350 Glu Thr Ser Leu Gly Phe Glu Cys Glu Cys Ser Pro Gly Trp Thr Gly 355 360 365 Pro Thr Cys Ser Thr Asn Ile Asp Asp Cys Ser Pro Asn Asn Cys Ser 370 375 380 His Gly Gly Thr Cys Gln Asp Leu Val Asn Gly Phe Lys Cys Val Cys 385 390 395 400 Pro Pro Gln Trp Thr Gly Lys Thr Cys Gln Leu Asp Ala Asn Glu Cys 405 410 415

Glu Ala Lys Pro Cys Val Asn Ala Lys Ser Cys Lys Asn Leu Ile Ala

420

430

Ser Tyr Tyr Cys Asp Cys Leu Pro Gly Trp Met Gly Gln Asn Cys Asp 445 445 Ile Asn Ile Asn Asp Cys Leu Gly Gln Cys Gln Asn Asp Ala Ser Cys 450 455 460 Arg Asp Leu Val Asn Gly Tyr Arg Cys Ile Cys Pro Pro Gly Tyr Ala 465 470 475 480 Gly Asp His Cys Glu Arg Asp Ile Asp Glu Cys Ala Ser Asn Pro Cys
485 490 495 Leu Asn Gly Gly His Cys Gln Asn Glu Ile Asn Arg Phe Gln Cys Leu 500 505 510 Cys Pro Thr Gly Phe Ser Gly Asn Leu Cys Gln Leu Asp Ile Asp Tyr 515 520 525 Cys Glu Pro Asn Pro Cys Gln Asn Gly Ala Gln Cys Tyr Asn Arg Ala 530 535 Ser Asp Tyr Phe Cys Lys Cys Pro Glu Asp Tyr Glu Gly Lys Asn Cys 545 550 560 Ser His Leu Lys Asp His Cys Arg Thr Thr Pro Cys Glu Val Ile Asp 565 570 575 Ser Cys Thr Val Ala Met Ala Ser Asn Asp Thr Pro Glu Gly Val Arg 580 585 590 Tyr Ile Ser Ser Asn Val Cys Gly Pro His Gly Lys Cys Lys Ser Gln 595 600 Ser Gly Gly Lys Phe Thr Cys Asp Cys Asn Lys Gly Phe Thr Gly Thr 610 620 Tyr Cys His Glu Asn Ile Asn Asp Cys Glu Ser Asn Pro Cys Arg Asn 625 630 635 640 Gly Gly Thr Cys Ile Asp Gly Val Asn Ser Tyr Lys Cys Ile Cys Ser 645 650 655 Asp Gly Trp Glu Gly Ala Tyr Cys Glu Thr Asn Ile Asn Asp Cys Ser 660 670 Gln Asn Pro Cys His Asn Gly Gly Thr Cys Arg Asp Leu Val Asn Asp 675 680 Phe Tyr Cys Asp Cys Lys Asn Gly Trp Lys Gly Lys Thr Cys His Ser

690

39467A.txt.txt 700

Arg Asp Ser Gln Cys Asp Glu Ala Thr Cys Asn Asn Gly Gly Thr Cys 705 710 715 720

Tyr Asp Glu Gly Asp Ala Phe Lys Cys Met Cys Pro Gly Gly Trp Glu 725 730 735

Gly Thr Thr Cys Asn Ile Ala Arg Asn Ser Ser Cys Leu Pro Asn Pro 740 745 750

Cys His Asn Gly Gly Thr Cys Val Val Asn Gly Glu Ser Phe Thr Cys 755 760 765

Val Cys Lys Glu Gly Trp Glu Gly Pro Ile Cys Ala Gln Asn Thr Asn 770 775 780

Asp Cys Ser Pro His Pro Cys Tyr Asn Ser Gly Thr Cys Val Asp Gly 785 790 795 800

Asp Asn Trp Tyr Arg Cys Glu Cys Ala Pro Gly Phe Ala Gly Pro Asp 805 810 815

Cys Arg Ile Asn Ile Asn Glu Cys Gln Ser Ser Pro Cys Ala Phe Gly 820 825 830

Ala Thr Cys Val Asp Glu Ile Asn Gly Tyr Arg Cys Val Cys Pro Pro 835 840 845

Gly His Ser Gly Ala Lys Cys Gln Glu Val Ser Gly Arg Pro Cys Ile 850 855 860

Thr Met Gly Ser Val Ile Pro Asp Gly Ala Lys Trp Asp Asp Cys 875 870 880

Asn Thr Cys Gln Cys Leu Asn Gly Arg Ile Ala Cys Ser Lys Val Trp 885 890 895

Cys Gly Pro Arg Pro Cys Leu Leu His Lys Gly His Ser Glu Cys Pro 900 905 910

Ser Gly Gln Ser Cys Ile Pro Ile Leu Asp Asp Gln Cys Phe Val His 915 920

Pro Cys Thr Gly Val Gly Glu Cys Arg Ser Ser Leu Gln Pro Val 930 935 940

Lys Thr Lys Cys Thr Ser Asp Ser Tyr Tyr Gln Asp Asn Cys Ala Asn 945 950 955 960

Ile Thr Phe Thr Phe Asn Lys Glu Met Met Ser Pro Gly Leu Thr Thr

975

39467A.txt.txt

965

Glu His Ile Cys Ser Glu Leu Arg Asn Leu Asn Ile Leu Lys Asn Val 980 985 990

Ser Ala Glu Tyr Ser Ile Tyr Ile Ala Cys Glu Pro Ser Pro Ser Ala 995 1000 1005

Asn Asn Glu Ile His Val Ala Ile Ser Ala Glu Asp Ile Arg Asp 1010 1015 1020

Asp Gly Asn Pro Ile Lys Glu Ile Thr Asp Lys Ile Ile Asp Leu 1025 1030 1035

Val Ser Lys Arg Asp Gly Asn Ser Ser Leu Ile Ala Ala Val Ala 1040 1045 1050

Glu Val Arg Val Gln Arg Arg Pro Leu Lys Asn Arg Thr Asp Phe 1055 1060 1065

Leu Val Pro Leu Leu Ser Ser Val Leu Thr Val Ala Trp Ile Cys 1070 1075 1080

Cys Leu Val Thr Ala Phe Tyr Trp Cys Leu Arg Lys Arg Arg Lys 1085 1095

Pro Gly Ser His Thr His Ser Ala Ser Glu Asp Asn Thr Thr Asn 1100 1105 1110

Asn Val Arg Glu Gln Leu Asn Gln Ile Lys Asn Pro Ile Glu Lys 1115 1120 1125

His Gly Ala Asn Thr Val Pro Ile Lys Asp Tyr Glu Asn Lys Asn 1130 1135 1140

Ser Lys Met Ser Lys Ile Arg Thr His Asn Ser Glu Val Glu Glu 1145 1150 1155

Asp Asp Met Asp Lys His Gln Gln Lys Ala Arg Phe Ala Lys Gln 1160 1170

Pro Ala Tyr Thr Leu Val Asp Arg Glu Glu Lys Pro Pro Asn Gly 1175 1180 1185

Thr Pro Thr Lys His Pro Asn Trp Thr Asn Lys Gln Asp Asn Arg 1190 1195 1200

Asp Leu Glu Ser Ala Gln Ser Leu Asn Arg Met Glu Tyr Ile Val 1205 1210 1215

<210> 24

<211> 5077 <212> DNA <213> Homo sapiens

<220> <221> misc_feature <223> Jagged-2

<400> ctcatgcata tgcaggtgcg cgggtgacga atgggcgagc gagctgtcag tctcgttccg 60 aacttgttgg ctgcggtgcc gggagcgcgg gcgcgcagag ccgaggccgg gacccgctgc 120 cttcaccgcc gccgccgtcg ccgccgggtg ggagccgggc cgggcagccg gagcgcggcc 180 gccagcgagc cggagctgcc gccgccctg cacgcccgcc gcccaggccc gcgcgccgcg 240 gcgctgcgct cgaccccgcc cgcgccgccg ccgccgccgc ctctgccgct gccgctgcct 300 ctgcgggcgc tcggagggcg ggcgggcgct gggaggccgg cgcggcggct gggagccggg 360 CGC999C99C 99C9GC999G CC999C99GC gggtcgcggg ggcaatgcgg gcgcagggcc 420 gggggcgcct tccccggcgg ctgctgctgc tgctggcgct ctgggtgcag gcggcgcgc 480 ccatgggcta tttcgagctg cagctgagcg cgctgcggaa cgtgaacggg gagctgctga 540 gcggcgcctg ctgtgacggc gacggccgga caacgcgcgc ggggggctgc ggccacgacg 600 agtgcgacac gtacgtgcgc gtgtgcctta aggagtacca ggccaaggtg acgcccacgg 660 ggccctgcag ctacggccac ggcgccacgc ccgtgctggg cggcaactcc ttctacctgc 720 cgccggcggg cgctgcgggg gaccgagcgc gggcgcgggc ccgggccggc ggcgaccaga 780 accogggeet egtegteate ecetteeagt tegeetggee gegeteettt acceteateg 840 tggaggcctg ggactgggac aacgatacca ccccgaatga ggagctgctg atcgagcgag 900 tgtcgcatgc cggcatgatc aacccggagg accgctggaa gagcctgcac ttcagcggcc 960 acgtggcgca cctggagctg cagatccgcg tgcgctgcga cgagaactac tacagcgcca 1020 cttgcaacaa gttctgccgg ccccgcaacg actttttcgg ccactacacc tgcqaccagt 1080 acggcaacaa ggcctgcatg gacggctgga tgggcaagga gtgcaaggaa gctgtgtqta 1140 aacaagggtg taatttgctc cacgggggat gcaccgtgcc tggggagtgc aggtgcagct 1200 acggctggca agggaggttc tgcgatgagt gtgtccccta ccccggctgc gtgcatggca 1260 gttgtgtgga gccctggcag tgcaactgtg agaccaactg gggcggcctg ctctgtgaca 1320 aagacctgaa ctactgtggc agccaccacc cctgcaccaa cggaggcacg tgcatcaacg 1380 ccgagcctga ccagtaccgc tgcacctgcc ctgacggcta ctcgggcagg aactgtgaga 1440 aggctgagca cgcctgcacc tccaacccgt gtgccaacgg gggctcttgc catgaggtgc 1500 cgtccggctt cgaatgccac tgcccatcgg gctggagcgg gcccacctgt gcccttgaca 1560 tcgatgagtg tgcttcgaac ccgtgtgcgg ccggtggcac ctgtgtggac caggtggacg 1620 gctttgagtg catctgcccc gagcagtggg tggqqqccac ctgccagctg gacqccaatg 1680 agtgtgaagg gaagccatgc cttaacgctt tttcttgcaa aaacctgatt ggcggctatt 1740

	•		39467A.txt			4500
actgtgattg	catcccgggc	tggaagggca	tcaactgcca	tatcaacgtc	aacgactgtc	1800
gcgggcagtg	tcagcatggg	ggcacctgca	aggacctggt	gaacgggtac	cagtgtgtgt	1860
gcccacgggg	cttcggaggc	cggcattgcg	agctggaacg	agacgagtgt	gccagcagcc	1920
cctgccacag	cggcggcctc	tgcgaggacc	tggccgacgg	cttccactgc	cactgccccc	1980
agggcttctc	cgggcctctc	tgtgaggtgg	atgtcgacct	ttgtgagcca	agcccctgcc	2040
ggaacggcgc	tcgctgctat	aacctggagg	gtgactatta	ctgcgcctgc	cctgatgact	2100
ttggtggcaa	gaactgctcc	gtgccccgcg	agccgtgccc	tggcggggcc	tgcagagtga	2160
tcgatggctg	cgggtcagac	gcggggcctg	ggatgcctgg	cacagcagcc	tccggcgtgt	2220
gtggcccca	tggacgctgc	gtcagccagc	cagggggcaa	cttttcctgc	atctgtgaca	2280
gtggctttac	tggcacctac	tgccatgaga	acattgacga	ctgcctgggc	cagccctgcc	2340
gcaatggggg	cacatgcatç	gatgaggtgg	acgccttccg	ctgcttctgc	cccagcggct	2400
gggagggcga	gctctgcgac	accaatccca	acgactgcct	tcccgatccc	tgccacagcc	2460
gcggccgctg	ctacgacctg	gtcaatgact	tctactgtgc	gtgcgacgac	ggctggaagg	2520
gcaagacctg	ccactcacgc	gagttccagt	gcgatgccta	cacctgcagc	aacggtggca	2580
cctgctacga	cagcggcgac	accttccgct	gcgcctgccc	ccccggctgg	aagggcagca	2640
cctgcgccgt	cgccaagaac	agcagctgcc	tgcccaaccc	ctgtgtgaat	ggtggcacct	2700
gcgtgggcag	cggggcctcc	ttctcctgca	tctgccggga	cggctgggag	ggtcgtactt	2760
gcactcacaa	taccaacgac	tgcaaccctc	tgccttgcta	caatggtggc	atctgtgttg	2820
acggcgtcaa	ctggttccgc	tgcgagtgtg	cacctggctt	cgcggggcct	gactgccgca	2880
tcaacatcga	cgagtgccag	tcctcgccct	gtgcctacgg	ggccacgtgt	gtggatgaga	2940
tcaacgggta	tcgctgtagc	tgcccacccg	gccgagccgg	ccccggtgc	caggaagtga	3000
tcgggttcgg	gagatcctgc	tggtcccggg	gcactccgtt	cccacacgga	agctcctggg	3060
tggaagactg	caacagctgc	cgctgcctgg	atggccgccg	tgactgcagc	aaggtgtggt	3120
gcggatggaa	gccttgtctg	ctggccggcc	agcccgaggc	cctgagcgcc	cagtgcccac	3180
tggggcaaag	gtgcctggag	aaggccccag	gccagtgtct	gcgaccaccc	tgtgaggcct	3240
ggggggagtg	cggcgcagaa	gagccaccga	gcaccccctg	cctgccacgc	tccggccacc	3300
tggacaataa	ctgtgcccgc	ctcaccttgc	atttcaaccg	tgaccacgtg	ccccagggca	3360
ccacggtggg	cgccatttgc	tccgggatcc	gctccctgcc	agccacaagg	gctgtggcac	3420
gggaccgcct	gctggtgttg	ctttgcgacc	gggcgtcctc	gggggccagt	gccgtggagg	3480
tggccgtgtc	cttcagccct	gccagggacc	tgcctgacag	cagcctgatc	cagggcgcgg	3540
cccacgccat	cgtggccgcc	atcacccagc	gggggaacag	ctcactgctc	ctggctgtca	3600
ccgaggtcaa	ggtggagacg	gttgttacgg	gcggctcttc	cacaggtctg	ctggtgcctg	3660
tgctgtgtgg	tgccttcagc	gtgctgtggc	tggcgtgcgt	ggtcctgtgc	gtgtggtgga	3720
	caggaaagag		•			3780

```
39467A.txt.txt
 accagtgggc cccgctcaac cccatccgca accccatcga gcggccgggg ggccacaagg
                                                                      3840
acgtgctcta ccagtgcaag aacttcacgc cgccgccgcg cagggcggac gaggcgctgc
                                                                      3900
ccgggccggc cggccacgcg gccgtcaggg aggatgagga ggacgaggat ctgggccgcg
                                                                      3960
gtgaggagga ctccctggag gcggagaagt tcctctcaca caaattcacc aaagatcctg
                                                                      4020
gccgctcgcc ggggaggccg gcccactggg cctcaggccc caaagtggac aaccgcgcgg
                                                                      4080
tcaggagcat caatgaggcc cgctacgccg gcaaggagta ggggcggctg ccagctgggc
                                                                     4140
cgggacccag ggccctcggt gggagccatg ccgtctgccg gacccggagg ccgaggccat
                                                                     4200
gtgcatagtt tctttatttt gtgtaaaaaa accaccaaaa acaaaaacca aatgtttatt
                                                                     4260
ttctacgttt ctttaacctt gtataaatta ttcagtaact gtcaggctga aaacaatgga
                                                                     4320
gtattctcgg atagttgcta tttttgtaaa gtttccgtgc gtggcactcg ctgtatgaaa
                                                                     4380
ggagagagca aagggtgtct gcgtcgtcac caaatcgtag cgtttgttac cagaggttgt
                                                                     4440
gcactgttta cagaatcttc cttttattcc tcactcgggt ttctctgtgg ctccaggcca
                                                                     4500
aagtgccggt gagacccatg gctgtgttgg tgtggcccat ggctgttggt gggacccgtg
                                                                     4560
gctgatggtg tggcctgtgg ctgtcggtgg gactcgtggc tgtcaatggg acctgtggct
                                                                     4620
gtcggtggga cctacggtgg tcggtgggac cctggttatt gatgtggccc tggctgccgg
                                                                     4680
cacggcccgt ggctgttgac gcacctgtgg ttgttagtgg ggcctgaggt catcggcgtg
                                                                     4740
gcccaaggcc ggcaggtcaa cctcgcgctt gctggccagt ccaccctgcc tgccgtctgt
                                                                     4800
gcttcctcct gcccagaacg cccgctccag cgatctctcc actgtgcttt cagaagtgcc
                                                                     4860
cttcctgctg cgcagttctc ccatcctggg acggcggcag tattgaagct cgtgacaagt
                                                                     4920
gccttcacac agacccctcg caactgtcca cgcgtgccgt ggcaccaggc gctgccacc
                                                                     4980
tgccggcccc ggccgcccct cctcgtgaaa gtgcattttt gtaaatgtgt acatattaaa
                                                                     5040
ggaagcactc tgtatatttg attgaataat gccacca
                                                                     5077
```

```
<210> 25
<211> 1238
<212> PRT
```

<400> 25

Met Arg Ala Gln Gly Arg Gly Arg Leu Pro Arg Arg Leu Leu Leu 10 15

Leu Ala Leu Trp Val Gln Ala Ala Arg Pro Met Gly Tyr Phe Glu Leu 20 25 30

Gln Leu Ser Ala Leu Arg Asn Val Asn Gly Glu Leu Leu Ser Gly Ala 35 40 45

<213> Homo sapiens

<220> <221> misc_feature <223> Jagged-2

								55	.077						
Cys	cys 50	Asp	ĠÌу	Asp	Gly	Arg 55	Thr	Thr	Arg	Ala	G]у 60	Glу	Cys	Glу	His
Asp 65	Glu	Cys	Asp	Thr	Tyr 70	٧a٦	Arg	٧al	Cys	Leu 75	Lys	Glu	Tyr	G In	АТа 80
Lys	٧a٦	Thr	Pro	Thr 85	GÌу	Pro	Cys	ser	Туг 90	Glу	нis	Gly	Ala	Thr 95	Pro
val	Leu	Glу	Gly 100	Asn	Ser	Phe	Tyr	Leu 105	Pro	Pro	Ala	Glу	Ala 110	Ala	Gly
Asp	Arg	A-la- 115	Arg	Αla	Arg	Ala	Arg 120	Ala	Gly	Glу	Asp	G]n 125	Asp	Pro	Glу
Leu	∨al 130	val	Ile	Pro	Phe	Gln 135	Phe	Аlа	Trp	Pro	Arg 140	Ser	Phe	Thr	Leu
Ile 145	val	Glu	Ala	Trp	Asp 150	Trp	Asp	Asn	Asp	Thr 155	Thr	Pro	Așn	Glu	Glu 160
Ľeu.	Leu	Ile	Glu	Arg 165	val	Ser	His	Ala	Gly 170	меt	Ile	Asn	Pro	Glu 175	Asp
Arg	Trp	Lys	ser 180	Leu	нis	Phe	Ser	Gly 185	His	٧a٦	Ala	нis	Leu 190	Glu	Leu
Gln	Ile	Arg 195	val	Arg	Cys	Asp	G1u 200	Asn	Туг	туг	Ser	Ala 205	Thr	Cys	Asn
Lys	Phe 210	Cys	Arg	Pro	Arg	Asn 215	Asp	Phe	Phe	Gly	нis 220	Туг	Thr	Cys	Asp
G]n 225	Tyr	Gly	Asn	Lys	Ala 230	Cys	Met	Asp	Gly	Trp 235	Met	Gly	Lys	Glu	Cys 240
Lys	Glu	Ala	val	Cys 245	Lys	Gln	бĺу	Cys	Asn 250	Leu	Leu	нis	Gly	G1y 255	Cys
Thr	∨al	Pro	Gly 260	Glu	Cys	Arg	Cys	ser 265	Tyr	Gly	Тгр	Gln	G]y 270	Arg	Phe
Cys	Asp	G]u 275	Cys	٧al	Pro	Tyr	Pro 280	Gly	Cys	٧a٦	His	G]y 285	Ser	Cys	val
Glu	Pro 290	Trp	Gln	Cys	Asn	Cys 295	Glu	Thr	Asn	Trp	Gly 300	Gly	Leu	Leu	Cys
Asp 305	Lys	Asp	Leu	Asn	Tyr 310	Cys	Glу	Ser	нis	ніs 315	Pro	Cys	Thr	Asn	Gly 320

Gly Thr Cys Ile Asn Ala Glu Pro Asp Gln Tyr Arg Cys Thr Cys Pro 325 330 335

Asp Gly Tyr Ser Gly Arg Asn Cys Glu Lys Ala Glu His Ala Cys Thr 340 345 350

Ser Asn Pro Cys Ala Asn Gly Gly Ser Cys His Glu Val Pro Ser Gly 355 360 365

Phe Glu Cys His Cys Pro Ser Gly Trp Ser Gly Pro Thr Cys Ala Leu 370 375 380

Asp Ile Asp Glu Cys Ala Ser Asn Pro Cys Ala Ala Gly Gly Thr Cys 385 390 395 400

Val Asp Gln Val Asp Gly Phe Glu Cys Ile Cys Pro Glu Gln Trp Val 405 410 415

Gly Ala Thr Cys Gln Leu Asp Ala Asn Glu Cys Glu Gly Lys Pro Cys 420 430

Leu Asn Ala Phe Ser Cys Lys Asn Leu Ile Gly Gly Tyr Tyr Cys Asp 445

Cys Ile Pro Gly Trp Lys Gly Ile Asn Cys His Ile Asn Val Asn Asp 450 455 460

Cys Arg Gly Gln Cys Gln His Gly Gly Thr Cys Lys Asp Leu Val Asn 470 475 480

Gly Tyr Gln Cys Val Cys Pro Arg Gly Phe Gly Gly Arg His Cys Glu 485 490 495

Leu Glu Arg Asp Glu Cys Ala Ser Ser Pro Cys His Ser Gly Gly Leu 500 505 510

Cys Glu Asp Leu Ala Asp Gly Phe His Cys His Cys Pro Gln Gly Phe 515 525

Ser Gly Pro Leu Cys Glu Val Asp Val Asp Leu Cys Glu Pro Ser Pro 530 540

Cys Arg Asn Gly Ala Arg Cys Tyr Asn Leu Glu Gly Asp Tyr Tyr Cys 545 550 550 560

Ala Cys Pro Asp Asp Phe Gly Gly Lys Asn Cys Ser Val Pro Arg Glu 565 570 575

Pro Cys Pro Gly Gly Ala Cys Arg Val Ile Asp Gly Cys Gly Ser Asp 580 585 590

Ala Gly Pro Gly Met Pro Gly Thr Ala Ala Ser Gly Val Cys Gly Pro 595 600 605 His Gly Arg Cys Val Ser Gln Pro Gly Gly Asn Phe Ser Cys Ile Cys 610 620 Asp Ser Gly Phe Thr Gly Thr Tyr Cys His Glu Asn Ile Asp Asp Cys 625 630 640 Leu Gly Gln Pro Cys Arg Asn Gly Gly Thr Cys Ile Asp Glu Val Asp 645 650 655 Ala Phe Arg Cys Phe Cys Pro Ser Gly Trp Glu Gly Glu Leu Cys Asp 660 670 Thr Asn Pro Asn Asp Cys Leu Pro Asp Pro Cys His Ser Arg Gly Arg 675 680 685 Cys Tyr Asp Leu Val Asn Asp Phe Tyr Cys Ala Cys Asp Asp Gly Trp 690 695 700 Lys Gly Lys Thr Cys His Ser Arg Glu Phe Gln Cys Asp Ala Tyr Thr 705 710 715 720 Cys Ser Asn Gly Gly Thr Cys Tyr Asp Ser Gly Asp Thr Phe Arg Cys 725 730 735 Ala Cys Pro Pro Gly Trp Lys Gly Ser Thr Cys Ala Val Ala Lys Asn 740 745 750 Ser Ser Cys Leu Pro Asn Pro Cys Val Asn Gly Gly Thr Cys Val Gly 755 760 765 Ser Gly Ala Ser Phe Ser Cys Ile Cys Arg Asp Gly Trp Glu Gly Arg 770 775 780 Thr Cys Thr His Asn Thr Asn Asp Cys Asn Pro Leu Pro Cys Tyr Asn 785 790 795 800 Gly Gly Ile Cys Val Asp Gly Val Asn Trp Phe Arg Cys Glu Cys Ala 805 810 815 Pro Gly Phe Ala Gly Pro Asp Cys Arg Ile Asn Ile Asp Glu Cys Gln 820 825 830 Ser Ser Pro Cys Ala Tyr Gly Ala Thr Cys Val Asp Glu Ile Asn Gly 835 840 845 Tyr Arg Cys Ser Cys Pro Pro Gly Arg Ala Gly Pro Arg Cys Gln Glu 850 855 860

Val Ile Gly Phe Gly Arg Ser Cys Trp Ser Arg Gly Thr Pro Phe Pro 865 870 875 880

His Gly Ser Ser Trp Val Glu Asp Cys Asn Ser Cys Arg Cys Leu Asp 885 890 895

Gly Arg Arg Asp Cys Ser Lys Val Trp Cys Gly Trp Lys Pro Cys Leu 900 910

Leu Ala Gly Gln Pro Glu Ala Leu Ser Ala Gln Cys Pro Leu Gly Gln 915 920 925

Arg Cys Leu Glu Lys Ala Pro Gly Gln Cys Leu Arg Pro Pro Cys Glu 930 935 940

Ala Trp Gly Glu Cys Gly Ala Glu Glu Pro Pro Ser Thr Pro Cys Leu 945 950 955 960

Pro Arg Ser Gly His Leu Asp Asn Asn Cys Ala Arg Leu Thr Leu His 965 970 975

Phe Asn Arg Asp His Val Pro Gln Gly Thr Thr Val Gly Ala Ile Cys 980 985 990

Ser Gly Ile Arg Ser Leu Pro Ala Thr Arg Ala Val Ala Arg Asp Arg 995 1000 1005

Leu Leu Val Leu Leu Cys Asp Arg Ala Ser Ser Gly Ala Ser Ala 1010 1015 1020

Val Glu Val Ala Val Ser Phe Ser Pro Ala Arg Asp Leu Pro Asp 1025 1030 1035

Ser Ser Leu Ile Gln Gly Ala Ala His Ala Ile Val Ala Ala Ile 1040 1045 1050

Thr Gln Arg Gly Asn Ser Ser Leu Leu Leu Ala Val Thr Glu Val 1055 1060 1065

Lys Val Glu Thr Val Val Thr Gly Gly Ser Ser Thr Gly Leu Leu 1070 1080

Val Pro Val Leu Cys Gly Ala Phe Ser Val Leu Trp Leu Ala Cys 1085 1090 1095

Val Val Leu Cys Val Trp Trp Thr Arg Lys Arg Arg Lys Glu Arg 1100 1105 1110

Glu Arg Ser Arg Leu Pro Arg Glu Glu Ser Ala Asn Asn Gln Trp 1115 1120 1125

Ala Pr	o Leu	Asn	Pro	Ile	Arg	Asn	Pro	Ile	Glu	Arg	Pro	Gly	Gly
	.30				1135		•			1140			

His Lys Asp Val Leu Tyr Gln Cys Lys Asn Phe Thr Pro Pro Pro 1145 1150 1155

Arg Arg Ala Asp Glu Ala Leu Pro Gly Pro Ala Gly His Ala Ala 1160 1165 1170

Val Arg Glu Asp Glu Glu Asp Glu Asp Leu Gly Arg Gly Glu Glu 1175 1180 1185

Asp Ser Leu Glu Ala Glu Lys Phe Leu Ser His Lys Phe Thr Lys 1190 1195 1200

Asp Pro Gly Arg Ser Pro Gly Arg Pro Ala His Trp Ala Ser Gly 1205 1210 1215

Pro Lys Val Asp Asn Arg Ala Val Arg Ser Ile Asn Glu Ala Arg 1220 1225 1230

Tyr Ala Gly Lys Glu 1235

<210> 26

<211> 4963

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Jagged2, transcript variant 2

<400> 60 ctcatgcata tgcaggtgcg cgggtgacga atgggcgagc gagctgtcag tctcgttccg 120 aacttgttgg ctgcggtgcc gggagcgcgg gcgcgcagag ccgaggccgg gacccgctgc 180 cttcaccgcc gccgccgtcg ccgccgggtg ggagccgggc cgggcagccg gagcgcggcc 240 gccagcgagc cggagctgcc gccgccctg cacgcccgcc gcccaggccc gcgcgccgcg 300 gcqctqcqct cgaccccqcc cgcqccqccq ccqccqccqc ctctqccqct gccqctqcct ctgcgggcgc tcggaggcg ggcgggcgct gggaggccgg cgcggcggct gggagccggg 360 420 cgcgggcggc ggcggcgggg ccggggcgggc gggtcgcggg ggcaatgcgg gcgcagggcc 480 ccatgggcta tttcgagctg cagctgagcg cgctgcggaa cgtgaacggg gagctgctga 540 600 gcggcgcctg ctgtgacggc gacggccgga caacgcgcgc ggggggctgc ggccacgacg agtgcgacac gtacgtgcgc gtgtgcctta aggagtacca ggccaaggtg acgcccacgg 660 720 ggccctgcag ctacggccac ggcgccacgc ccgtgctggg cggcaactcc ttctacctgc

39467A.txt.txt cgccggcggg cgctgcggg gaccgagcgc gggcgcgggc ccgggccggc ggcgaccagg	780
acccgggcct cgtcgtcatc cccttccagt tcgcctggcc gcgctccttt accctcatcg	840
tggaggcctg ggactgggac aacgatacca ccccgaatga ggagctgctg atcgagcgag	900
tgtcgcatgc cggcatgatc aacccggagg accgctggaa gagcctgcac ttcagcggcc	960
acgtggcgca cctggagctg cagatccgcg tgcgctgcga cgagaactac tacagcgcca	1020
cttgcaacaa gttctgccgg ccccgcaacg actttttcgg ccactacacc tgcgaccagt	1080
acggcaacaa ggcctgcatg gacggctgga tgggcaagga gtgcaaggaa gctgtgtgta	1140
aacaagggtg taatttgctc cacgggggat gcaccgtgcc tggggagtgc aggtgcagct	1200
acggctggca agggaggttc tgcgatgagt gtgtccccta ccccggctgc gtgcatggca	1260
gttgtgtgga gccctggcag tgcaactgtg agaccaactg gggcggcctg ctctgtgaca	1320
aagacctgaa ctactgtggc agccaccacc cctgcaccaa cggaggcacg tgcatcaacg	1380
ccgagcctga ccagtaccgc tgcacctgcc ctgacggcta ctcgggcagg aactgtgaga	1440
aggctgagca cgcctgcacc tccaacccgt gtgccaacgg gggctcttgc catgaggtgc	1500
cgtccggctt cgaatgccac tgcccatcgg gctggagcgg gcccacctgt gcccttgaca	1560
togatgagtg tgcttcgaac ccgtgtgcgg ccggtggcac ctgtgtggac caggtggacg	1620
gctttgagtg catctgcccc gagcagtggg tgggggccac ctgccagctg gacgtcaacg	1680
actgtcgcgg gcagtgtcag catgggggca cctgcaagga cctggtgaac gggtaccagt	1740
gtgtgtgccc acggggcttc ggaggccggc attgcgagct ggaacgagac gagtgtgcca	1800
gcagcccctg ccacagcggc ggcctctgcg aggacctggc cgacggcttc cactgccact	1860
gcccccaggg cttctccggg cctctctgtg aggtggatgt cgacctttgt gagccaagcc	1920
cctgccggaa cggcgctcgc tgctataacc tggagggtga ctattactgc gcctgccctg	1980
atgactttgg tggcaagaac tgctccgtgc cccgcgagcc gtgccctggc ggggcctgca	2040
gagtgatcga tggctgcggg tcagacgcgg ggcctgggat gcctggcaca gcagcctccg	2100
gcgtgtgtgg cccccatgga cgctgcgtca gccagccagg gggcaacttt tcctgcatct	2160
gtgacagtgg ctttactggc acctactgcc atgagaacat tgacgactgc ctgggccagc	2220
cctgccgcaa tgggggcaca tgcatcgatg aggtggacgc cttccgctgc ttctgcccca	2280
gcggctggga gggcgagctc tgcgacacca atcccaacga ctgccttccc gatccctgcc	2340
acagccgcgg ccgctgctac gacctggtca atgacttcta ctgtgcgtgc gacgacggct	2400
ggaagggcaa gacctgccac tcacgcgagt tccagtgcga tgcctacacc tgcagcaacg	2460
gtggcacctg ctacgacagc ggcgacacct tccgctgcgc ctgcccccc ggctggaagg	2520
gcagcacctg cgccgtcgcc aagaacagca gctgcctgcc caacccctgt gtgaatggtg	2580
gcacctgcgt gggcagcggg gcctccttct cctgcatctg ccgggacggc tgggagggtc	2640
gtacttgcac tcacaatacc aacgactgca accctctgcc ttgctacaat ggtggcatct	2700
gtgttgacgg cgtcaactgg ttccgctgcg agtgtgcacc tggcttcgcg gggcctgact	2760

			39467A.txt			
gccgcatcaa	catcgacgag	tgccagtcct	cgccctgtgc	ctacggggcc	acgtgtgtgg	2820
atgagatcaa	cgggtatcgc	tgtagctgcc	cacccggccg	agccggcccc	cggtgccagg	2880
aagtgatcgg	gttcgggaga	tcctgctggt	cccggggcac	tccgttccca	cacggaagct	2940
cctgggtgga	agactgcaac	agctgccgct	gcctggatgg	ccgccgtgac	tgcagcaagg	3000
tgtggtgcgg	atggaagcct	tgtctgctgg	ccggccagcc	cgaggccctg	agcgcccagt	3060
gcccactggg	gcaaaggtgc	ctggagaagg	ccccaggcca	gtgtctgcga	ccaccctgtg	3120
aggcctgggg	ggagtgcggc	gcagaagagc	caccgagcac	cccctgcctg	ccacgctccg	3180
gccacctgga	caataactgt	gcccgcctca	ccttgcattt	caaccgtgac	cacgtgcccc	3240
agggcaccac	ggtgggcgcc	atttgctccg	ggatccgctc	cctgccagcc	acaagggctg	3300
tggcacggga	ccgcctgctg	gtgttgcttt	gcgaccgggc	gtcctcgggg	gccagtgccg	3360
tggaggtggc	cgtgtccttc	agccctgcca	gggacctgcc	tgacagcagc	ctgatccagg	3420
gcgcggccca	cgccatcgtg	gccgccatca	cccagcgggg	gaacagctca	ctgctcctgg	3480
ctgtcaccga	ggtcaaggtg	gagacggttg	ttacgggcgg	ctcttccaca	ggtctgctgg	3540
tgcctgtgct	gtgtggtgcc	ttcagcgtgc	tgtggctggc	gtgcgtggtc	ctgtgcgtgt	3600
ggtggacacg	caagcgcagg	aaagagcggg	agaggagccg	gctgccgcgg	gaggagagcg	3660
ccaacaacca	gtgggccccg	ctcaacccca	tccgcaaccc	catcgagcgg	ccggggggcc	3720
acaaggacgt	gctctaccag	tgcaagaact	tcacgccgcc	gccgcgcagg	gcggacgagg	3780
cgctgcccgg	gccggccggc	cacgcggcċg	tcagggagga	tgaggaggac	gaggatctgg	3840
gccgcggtga	ggaggactcc	ctggaggcgg	agaagttcct	ctcacacaaa	ttcaccaaag	3900
atcctggccg	ctcgccgggg	aggccggccc	actgggcctc	aggccccaaa	gtggacaacc	3960
gcgcggtcag	gagcatcaat	gaggcccgct	acgccggcaa	ggagtagggg	cggctgccag	4020
ctgggccggg	acccagggcc	ctcggtggga	gccatgccgt	ctgccggacc	cggaggccga	4080
ggccatgtgc	atagtttctt	tattttgtgt	aaaaaaacca	ccaaaaacaa	aaaccaaatg	4140
tttattttct	acgtttcttt	aaccttgtat	aaattattca	gtaactgtca	ggctgaaaac	4200
aatggagtat	tctcggatag	ttgctatttt	tgtaaagttt	ccgtgcgtgg	cactcgctgt	4260
atgaaaggag	agagcaaagg	gtgtctgcgt	cgtcaccaaa	tcgtagcgtt	tgttaccaga	4320
ggttgtgcac	tgtttacaga	atcttccttt	tattcctcac	tcgggtttct	ctgtggctcc	4380
aggccaaagt	gccggtgaga	cccatggctg	tgttggtgtg	gcccatggct	gttggtggga	4440
cccgtggctg	atggtgtggc	ctgtggctgt	cggtgggact	cgtggctgtc	aatgggacct	4500
gtggctgtcg	gtgggaccta	cggtggtcgg	tgggaccctg	gttattgatg	tggccctggc	4560
tgccggcacg	gcccgtggct	gttgacgcac	ctgtggttgt	tagtggggcc	tgaggtcatc	4620
	•	ggtcaacctc				4680
		agaacgcccg				4740
		gttctcccat				4800

39467A.txt.txt
acaagtgcct tcacacagac ccctcgcaac tgtccacgcg tgccgtggca ccaggcgctg 4860
cccacctgcc ggccccggcc gcccctcctc gtgaaagtgc atttttgtaa atgtgtacat 4920
attaaaggaa gcactctgta tatttgattg aataatgcca cca 4963

<210> 27 <211> 1200

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Jagged2, transcript variant 2

<400> 27

Met Arg Ala Gln Gly Arg Gly Arg Leu Pro Arg Arg Leu Leu Leu 10 15

Leu Ala Leu Trp Val Gln Ala Arg Pro Met Gly Tyr Phe Glu Leu 20 25 30

Gln Leu Ser Ala Leu Arg Asn Val Asn Gly Glu Leu Leu Ser Gly Ala 35 40 45

Cys Cys Asp Gly Asp Gly Arg Thr Thr Arg Ala Gly Gly Cys Gly His 50 55 60

Asp Glu Cys Asp Thr Tyr Val Arg Val Cys Leu Lys Glu Tyr Gln Ala 65 70 75 80

Lys Val Thr Pro Thr Gly Pro Cys Ser Tyr Gly His Gly Ala Thr Pro 85 90 95

Val Leu Gly Gly Asn Ser Phe Tyr Leu Pro Pro Ala Gly Ala Ala Gly 100 105

Asp Arg Ala Arg Ala Arg Ala Gly Gly Asp Gln Asp Pro Gly 115 120 125

Leu Val Val Ile Pro Phe Gln Phe Ala Trp Pro Arg Ser Phe Thr Leu 130 135 140

Ile Val Glu Ala Trp Asp Trp Asp Asn Asp Thr Thr Pro Asn Glu Glu 145 150 155 160

Leu Leu Ile Glu Arg Val Ser His Ala Gly Met Ile Asn Pro Glu Asp 165 170 175

Arg Trp Lys Ser Leu His Phe Ser Gly His Val Ala His Leu Glu Leu 180 185 190

Gln Ile Arg Val Arg Cys Asp Glu Asn Tyr Tyr Ser Ala Thr Cys Asn

195

200 205

Lys Phe Cys Arg Pro Arg Asn Asp Phe Phe Gly His Tyr Thr Cys Asp 210 215 220 Gln Tyr Gly Asn Lys Ala Cys Met Asp Gly Trp Met Gly Lys Glu Cys 225 230 235 240 Lys Glu Ala Val Cys Lys Gln Gly Cys Asn Leu Leu His Gly Gly Cys 245 250 255 Thr Val Pro Gly Glu Cys Arg Cys Ser Tyr Gly Trp Gln Gly Arg Phe 260 265 270 Cys Asp Glu Cys Val Pro Tyr Pro Gly Cys Val His Gly Ser Cys Val 275 280 285 Glu Pro Trp Gln Cys Asn Cys Glu Thr Asn Trp Gly Gly Leu Leu Cys 290 295 300 Asp Lys Asp Leu Asn Tyr Cys Gly Ser His His Pro Cys Thr Asn Gly 305 310 315 320 Gly Thr Cys Ile Asn Ala Glu Pro Asp Gln Tyr Arg Cys Thr Cys Pro 325 330 335 Asp Gly Tyr Ser Gly Arg Asn Cys Glu Lys Ala Glu His Ala Cys Thr 340 345 Ser Asn Pro Cys Ala Asn Gly Gly Ser Cys His Glu Val Pro Ser Gly 355 360 365 Phe Glu Cys His Cys Pro Ser Gly Trp Ser Gly Pro Thr Cys Ala Leu 370 375 380 Asp Ile Asp Glu Cys Ala Ser Asn Pro Cys Ala Ala Gly Gly Thr Cys 385 390 395 400 Val Asp Gln Val Asp Gly Phe Glu Cys Ile Cys Pro Glu Gln Trp Val 405 410 415 Gly Ala Thr Cys Gln Leu Asp Val Asn Asp Cys Arg Gly Gln Cys Gln 420 425 430 His Gly Gly Thr Cys Lys Asp Leu Val Asn Gly Tyr Gln Cys Val Cys 435 440 445 Pro Arg Gly Phe Gly Gly Arg His Cys Glu Leu Glu Arg Asp Glu Cys 450 455 460 Ala Ser Ser Pro Cys His Ser Gly Gly Leu Cys Glu Asp Leu Ala Asp

480

465 Gly Phe His Cys His Cys Pro Gln Gly Phe Ser Gly Pro Leu Cys Glu 485 490 495 Val Asp Val Asp Leu Cys Glu Pro Ser Pro Cys Arg Asn Gly Ala Arg 500 505 510 Cys Tyr Asn Leu Glu Gly Asp Tyr Tyr Cys Ala Cys Pro Asp Asp Phe 515 525 Gly Gly Lys Asn Cys Ser Val Pro Arg Glu Pro Cys Pro Gly Gly Ala 530 535 540 Cys Arg Val Ile Asp Gly Cys Gly Ser Asp Ala Gly Pro Gly Met Pro 545 550 560 Gly Thr Ala Ala Ser Gly Val Cys Gly Pro His Gly Arg Cys Val Ser 565 570 575 Gln Pro Gly Gly Asn Phe Ser Cys Ile Cys Asp Ser Gly Phe Thr Gly 580 585 Thr Tyr Cys His Glu Asn Ile Asp Asp Cys Leu Gly Gln Pro Cys Arg 595 600 605 Asn Gly Gly Thr Cys Ile Asp Glu Val Asp Ala Phe Arg Cys Phe Cys 610 620 Pro Ser Gly Trp Glu Gly Glu Leu Cys Asp Thr Asn Pro Asn Asp Cys 625 630 630 Leu Pro Asp Pro Cys His Ser Arg Gly Arg Cys Tyr Asp Leu Val Asn 645 650 Asp Phe Tyr Cys Ala Cys Asp Asp Gly Trp Lys Gly Lys Thr Cys His 660 665 670 Ser Arg Glu Phe Gln Cys Asp Ala Tyr Thr Cys Ser Asn Gly Gly Thr 675 680 685 Cys Tyr Asp Ser Gly Asp Thr Phe Arg Cys Ala Cys Pro Pro Gly Trp 690 695 700 Lys Gly Ser Thr Cys Ala Val Ala Lys Asn Ser Ser Cys Leu Pro Asn 705 710 715 720 Pro Cys Val Asn Gly Gly Thr Cys Val Gly Ser Gly Ala Ser Phe Ser 725 730 735

Cys Ile Cys Arg Asp Gly Trp Glu Gly Arg Thr Cys Thr His Asn Thr

740

750

Asn Asp Cys Asn Pro Leu Pro Cys Tyr Asn Gly Gly Ile Cys Val Asp 755 760 765 Gly Val Asn Trp Phe Arg Cys Glu Cys Ala Pro Gly Phe Ala Gly Pro 770 775 780 Asp Cys Arg Ile Asn Ile Asp Glu Cys Gln Ser Ser Pro Cys Ala Tyr 785 790 795 800 Gly Ala Thr Cys Val Asp Glu Ile Asn Gly Tyr Arg Cys Ser Cys Pro 805 810 815 Pro Gly Arg Ala Gly Pro Arg Cys Gln Glu Val Ile Gly Phe Gly Arg 820 825 830 Ser Cys Trp Ser Arg Gly Thr Pro Phe Pro His Gly Ser Ser Trp Val 835 840 845 Glu Asp Cys Asn Ser Cys Arg Cys Leu Asp Gly Arg Arg Asp Cys Ser 850 855 860 Lys Val Trp Cys Gly Trp Lys Pro Cys Leu Leu Ala Gly Gln Pro Glu 865 870 880 Ala Leu Ser Ala Gln Cys Pro Leu Gly Gln Arg Cys Leu Glu Lys Ala .885 890 895 Pro Gly Gln Cys Leu Arg Pro Pro Cys Glu Ala Trp Gly Glu Cys Gly 900 905 910 Ala Glu Glu Pro Pro Ser Thr Pro Cys Leu Pro Arg Ser Gly His Leu 915 920 925 Asp Asn Asn Cys Ala Arg Leu Thr Leu His Phe Asn Arg Asp His Val 930 935 Pro Gln Gly Thr Thr Val Gly Ala Ile Cys Ser Gly Ile Arg Ser Leu 945 950 955 960 Pro Ala Thr Arg Ala Val Ala Arg Asp Arg Leu Leu Val Leu Leu Cys 965 970 975 Asp Arg Ala Ser Ser Gly Ala Ser Ala Val Glu Val Ala Val Ser Phe 980 985 990 Ser Pro Ala Arg Asp Leu Pro Asp Ser Ser Leu Ile Gln Gly Ala Ala 995 1000 1005 His Ala Ile Val Ala Ala Ile Thr Gln Arg Gly Asn Ser Ser Leu

39467A.txt.txt 1010 1015 1020

Leu Leu Ala Val Thr Glu Val Lys Val Glu Thr Val Val Thr Gly
1025 1030 1035

Gly Ser Ser Thr Gly Leu Leu Val Pro Val Leu Cys Gly Ala Phe 1040 1045 1050

Ser Val Leu Trp Leu Ala Cys Val Val Leu Cys Val Trp Trp Thr 1055 1060 1065

Arg Lys Arg Arg Lys Glu Arg Glu Arg Ser Arg Leu Pro Arg Glu 1070 1080

Glu Ser Ala Asn Asn Gln Trp Ala Pro Leu Asn Pro Ile Arg Asn 1085 1090 1095

Pro Ile Glu Arg Pro Gly Gly His Lys Asp Val Leu Tyr Gln Cys 1100 1105 1110

Lys Asn Phe Thr Pro Pro Pro Arg Arg Ala Asp Glu Ala Leu Pro 1115 1120 1125

Gly Pro Ala Gly His Ala Ala Val Arg Glu Asp Glu Glu Asp Glu 1130 1135 1140

Asp Leu Gly Arg Gly Glu Glu Asp Ser Leu Glu Ala Glu Lys Phe 1145 1150 1155

Leu Ser His Lys Phe Thr Lys Asp Pro Gly Arg Ser Pro Gly Arg 1160 1165 1170

Pro Ala His Trp Ala Ser Gly Pro Lys Val Asp Asn Arg Ala Val 1175 1180 1185

Arg Ser Ile Asn Glu Ala Arg Tyr Ala Gly Lys Glu 1190 1200

<210> 28 <211> 3158

<212> DNA

<213> Homo sapiens

<220> <221> misc_feature

<221> mrsc_reature
<223> pelta like 1 (Notch ligand)

<400> 28

aaaccggaac ggggcccaac ttctggggcc tggagaaggg aaacgaagtc cccccggtt 60

tcccgaggtt gcctttcctc gggcatcctt ggtttcggcg ggacttcgca gggcggatat 120

aaagaacggc gcctttggga agaggcggag accggcttta aagaaagaag tcttggtcct 180

			39467A.txt			240
				gccgacgctc		240
tacgatcccc	cgcgcgtccg	ccgctgttct	aaggagagaa	gtgggggccc	cccaggctcg	300
cgcgtggagc	gaagcagcat	gggcagtcgg	tgcgcgctgg	ccctggcggt	gctctcggcc	360
ttgctgtgtc	aggtctggag	ctctggggtg	ttcgaactga	agctgcagga	gttcgtcaac	420
aagaaggggc	tgctggggaa	ccgcaactgc	tgccgcgggg	gcgcggggcc	accgccgtgc	480
gcctgccgga	ccttcttccg	cgtgtgcctc	aagcactacc	aggccagcgt	gtcccccgag	540
ccgccctgca	cctacggcag	cgccgtcacc	cccgtgctgg	gcgtcgactc	cttcagtctg	600
cccgacggcg	ggggcgccga	ctccgcgttc	agcaacccca	tccgcttccc	cttcggcttc	660
acctggccgg	gcaccttctc	tctgattatt	gaagctctcc	acacagattc	tcctgatgac	720
ctcgcaacag	aaaacccaga	aagactcatc	agccgcctgg	ccacccagag	gcacctgacg	780
gtgggcgagg	agtggtccca	ggacctgcac	agcagcggcc	gcacggacct	caagtactcc	840
taccgcttcg	tgtgtgacga	acactactac	ggagagggct	gctccgtttt	ctgccgtccc	900
cgggacgatg	ccttcggcca	cttcacctgt	ggggagcgtg	gggagaaagt	gtgcaaccct	960
ggctggaaag	ggccctactg	cacagagccg	atctgcctgc	ctggatgtga	tgagcagcat	1020
ggattttgtg	acaaaccagg	ggaatgcaag	tgcagagtgg	gctggcaggg	ccggtactgt	1080
gacgagtgta	tccgctatcc	aggctgtctc	catggcacct	gccagcagcc	ctggcagtgc	1140
aactgccagg	aaggctgggg	gggccttttc	tgcaaccagg	acctgaacta	ctgcacacac	1200
cataagccct	gcaagaatgg	agccacctgc	accaacacgg	gccaggggag	ctacacttgc	1260
tcttgccggc	ctgggtacac	aggtgccacc	tgcgagctgg	ggattgacga	gtgtgacccc	1320
agcccttgta	agaacggagg	gagctgcacg	gatctcgaga	acagctactc	ctgtacctgc	1380
ccacccggct	tctacggcaa	aatctgtgaa	ttgagtgcca	tgacctgtgc	ggacggccct	1440
tgctttaacg	ggggtcggtg	ctcagacagc	cccgatggag	ggtacagctg	ccgctgcccc	1500
gtgggctact	ccggcttcaa	ctgtgagaag	aaaattgact	actgcagctc	ttcaccctgt	1560
tctaatggtg	ccaagtgtgt	ggacctcggt	gatgcctacc	tgtgccgctg	ccaggccggc	1620
ttctcgggga	ggcactgtga	cgacaacgtg	gacgactgcg	cctcctccc	gtgcgccaac	1680
gggggcacct	gccgggatgg	cgtgaacgac	ttctcctgca	cctgcccgcc	tggctacacg	1740
ggcaggaact	gcagtgcccc	cgtcagcagg	tgcgagcacg	caccctgcca	caatggggcc	1800
acctgccacc	agaggggcca	cggctatgtg	tgcgaatgtg	cccgaagcta	cgggggtccc	1860
aactgccagt	tcctgctccc	cgagctgccc	ccgggcccag	cggtggtgga	cctcactgag	1920
aagctagagg	gccagggcgg	gccattcccc	tgggtggccg	tgtgcgccgg	ggtcatcctt	1980
gtcctcatgc	tgctgctggg	ctgtgccgct	gtggtggtct	gcgtccggct	gaggctgcag	2040
				agaccatgaa		2100
				gggccacgca		2160
	· .			acaagaatgg		2220

39467A.txt.txt cgctacccag cggtggacta taacctcgtg caggacctca agggtgacga caccgccgtc 2280 agggacgcgc acagcaagcg tgacaccaag tgccagcccc agggctcctc aggggaggag 2340 2400 aaggggaccc cgaccacact caggggtgga gaagcatctg aaagaaaaag gccggactcg ggctgttcaa cttcaaaaga caccaagtac cagtcggtgt acgtcatatc cgaggagaag 2460 2520 qatgagtgcg tcatagcaac tgaggtgtaa aatggaagtg agatggcaag actcccgttt 2580 ctcttaaaat aagtaaaatt ccaaggatat atgccccaac gaatgctgct gaagaggagg 2640 gaggcctcgt ggactgctgc tgagaaaccg agttcagacc gagcaggttc tcctcctgag 2700 gtcctcgacg cctgccgaca gcctgtcgcg gcccggccgc ctgcggcact gccttccgtg acgtcgccgt tgcactatgg acagttgctc ttaagagaat atatatttaa atgggtgaac 2760 tgaattacgc ctaagaagca tgcactgcct gagtgtatat tttggattct tatgagccag 2820 tcttttcttg aattagaaac acaaacactg cctttattgt cctttttgat acgaagatgt 2880 gctttttcta gatggaaaag atgtgtgtta ttttttggat ttgtaaaaat atttttcatg 2940 atatctgtaa aqcttgagta ttttgtgatg ttcgtttttt ataatttaaa ttttggtaaa 3000 tatgtacaaa ggcacttcgg gtctatgtga ctatattttt ttgtatataa atgtatttat 3060 3120 qqaatattgt gccaatgtta tttgagtttt ttactgtttt gttaatgaag aaattccttt 3158 ttaaaatatt tttccaaaat aaattttatg aggaattc

```
<210> 29
<211> 723
<212> PRT
```

<400>

<220> <221> misc_feature <223> Delta like 1 (Notch ligand)

Met Gly Ser Arg Cys Ala Leu Ala Leu Ala Val Leu Ser Ala Leu Leu 1 10 15

Cys Gln Val Trp Ser Ser Gly Val Phe Glu Leu Lys Leu Gln Glu Phe 20 25 30

Val Asn Lys Lys Gly Leu Leu Gly Asn Arg Asn Cys Cys Arg Gly Gly 35 40 45

Ala Gly Pro Pro Cys Ala Cys Arg Thr Phe Phe Arg Val Cys Leu 50 60

Lys His Tyr Gln Ala Ser Val Ser Pro Glu Pro Pro Cys Thr Tyr Gly 65 70 75 80

Ser Ala Val Thr Pro Val Leu Gly Val Asp Ser Phe Ser Leu Pro Asp 85 90 95

<213> Homo sapiens

Gly Gly Gly Ala Asp Ser Ala Phe Ser Asn Pro Ile Arg Phe Pro Phe 100 105 110 Gly Phe Thr Trp Pro Gly Thr Phe Ser Leu Ile Ile Glu Ala Leu His 115 120 125 Thr Asp Ser Pro Asp Asp Leu Ala Thr Glu Asn Pro Glu Arg Leu Ile 130 135 140 Ser Arg Leu Ala Thr Gln Arg His Leu Thr Val Gly Glu Glu Trp Ser 145 150 155 160 Gln Asp Leu His Ser Ser Gly Arg Thr Asp Leu Lys Tyr Ser Tyr Arg 165 170 175 Phe Val Cys Asp Glu His Tyr Tyr Gly Glu Gly Cys Ser Val Phe Cys 180 185 Arg Pro Arg Asp Asp Ala Phe Gly His Phe Thr Cys Gly Glu Arg Gly 195 200 205 Glu Lys Val Cys Asn Pro Gly Trp Lys Gly Pro Tyr Cys Thr Glu Pro 210 220 Ile Cys Leu Pro Gly Cys Asp Glu Gln His Gly Phe Cys Asp Lys Pro 225 230 235 240 Gly Glu Cys Lys Cys Arg Val Gly Trp Gln Gly Arg Tyr Cys Asp Glu 245 250 255 Cys Ile Arg Tyr Pro Gly Cys Leu His Gly Thr Cys Gln Gln Pro Trp 260 265 270 Gln Cys Asn Cys Gln Glu Gly Trp Gly Gly Leu Phe Cys Asn Gln Asp 275 280 285 Leu Asn Tyr Cys Thr His His Lys Pro Cys Lys Asn Gly Ala Thr Cys 290 295 300 Thr Asn Thr Gly Gln Gly Ser Tyr Thr Cys Ser Cys Arg Pro Gly Tyr 305 310 315 320 Thr Gly Ala Thr Cys Glu Leu Gly Ile Asp Glu Cys Asp Pro Ser Pro 325 330 335 Cys Lys Asn Gly Gly Ser Cys Thr Asp Leu Glu Asn Ser Tyr Ser Cys 340 345Thr Cys Pro Pro Gly Phe Tyr Gly Lys Ile Cys Glu Leu Ser Ala Met 355 360 365

Thr Cys Ala Asp Gly Pro Cys Phe Asn Gly Gly Arg Cys Ser Asp Ser 370 375 380 Pro Asp Gly Gly Tyr Ser Cys Arg Cys Pro Val Gly Tyr Ser Gly Phe 385 390 395 400 Asn Cys Glu Lys Lys Ile Asp Tyr Cys Ser Ser Ser Pro Cys Ser Asn 405 415 Gly Ala Lys Cys Val Asp Leu Gly Asp Ala Tyr Leu Cys Arg Cys Gln
420 425 430 Ala Gly Phe Ser Gly Arg His Cys Asp Asp Asp Val Asp Asp Cys Ala 435 440 445 Ser Ser Pro Cys Ala Asn Gly Gly Thr Cys Arg Asp Gly Val Asn Asp 450 460 Phe Ser Cys Thr Cys Pro Pro Gly Tyr Thr Gly Arg Asn Cys Ser Ala 465 470 475 480 Pro Val Ser Arg Cys Glu His Ala Pro Cys His Asn Gly Ala Thr Cys 485 490 495 His Gln Arg Gly His Gly Tyr Val Cys Glu Cys Ala Arg Ser Tyr Gly
500 505 510 Gly Pro Asn Cys Gln Phe Leu Leu Pro Glu Leu Pro Pro Gly Pro Ala 515 520 525 Val Val Asp Leu Thr Glu Lys Leu Glu Gly Gln Gly Gly Pro Phe Pro 530 540 Trp Val Ala Val Cys Ala Gly Val Ile Leu Val Leu Met Leu Leu Leu 545 550 556 Gly Cys Ala Ala Val Val Cys Val Arg Leu Arg Leu Gln Lys His
565 570 575 Arg Pro Pro Ala Asp Pro Cys Arg Gly Glu Thr Glu Thr Met Asn Asn 580 585 590 Leu Ala Asn Cys Gln Arg Glu Lys Asp Ile Ser Val Ser Ile Ile Gly 595 600 Ala Thr Gln Ile Lys Asn Thr Asn Lys Lys Ala Asp Phe His Gly Asp 610 615 620 His Ser Ala Asp Lys Asn Gly Phe Lys Ala Arg Tyr Pro Ala Val Asp 625 630 640

Tyr Asn Leu Val Gln Asp Leu Lys Gly Asp Asp Thr Ala Val Arg Asp 645 650 655

Ala His Ser Lys Arg Asp Thr Lys Cys Gln Pro Gln Gly Ser Ser Gly 660 665 670

Glu Glu Lys Gly Thr Pro Thr Thr Leu Arg Gly Gly Glu Ala Ser Glu 675 680 685

Arg Lys Arg Pro Asp Ser Gly Cys Ser Thr Ser Lys Asp Thr Lys Tyr 690 695 700

Gln Ser Val Tyr Val Ile Ser Glu Glu Lys Asp Glu Cys Val Ile Ala 705 710 715 720

Thr Glu Val

<210> 30 <211> 1971

<212> DNA <213> Homo sapiens

<220>

<221> misc_feature

<223> Delta like 3 (Notch ligand)

<400> 60 gaaggccatg gtctccccac ggatgtccgg gctcctctcc cagactgtga tcctagcgct cattttcctc ccccagacac ggcccgctgg cgtcttcgag ctgcagatcc actctttcgg 120 180 gccgggtcca ggccctgggg ccccgcggtc cccctgcagc gcccggctcc cctgccgcct 240 cttcttcaga gtctgcctga agcctgggct ctcagaggag gccgccgagt ccccgtgcgc 300 cctgggcgcg gcgctgagtg cgcgcggacc ggtctacacc gagcagcccg gagcgcccgc 360 caccttctct ttcatcatcg aaacctggag agaggagtta ggagaccaga ttggagggcc 420 cgcctggagc ctgctggcgc gcgtggctgg caggcggcgc ttggcagccg gaggcccgtg 480 540 ggcccgggac attcagcgcg caggcgcctg ggagctgcgc ttctcgtacc gcgcgcgctg 600 cgagccqcct gccgtcggga ccgcgtgcac gcgcctctgc cgtccgcgca gcgcccctc gcggtgcggt ccgggactgc gcccctgcgc accgctcgag gacgaatgtg aggcgccgct 660 720 ggtgtgccga gcaggctgca gccctgagca tggcttctgt gaacagcccg gtgaatgccg 780 atgcctagag ggctggactg gacccctctg cacggtccct gtctccacca gcagctgcct 840 cagccccagg ggcccgtcct ctgctaccac cggatgcctt gtccctgggc ctgggccctg 900 tgacgggaac ccgtgtgcca atggaggcag ctgtagtgag acacccaggt cctttgaatg 960 cacctgcccg cgtgggttct acgggctgcg gtgtgaggtg agcggggtga catgtgcaga

39467A.txt.txt tggaccctgc ttcaacggcg gcttgtgtgt cgggggtgca gaccctgact ctgcctacat 1020 ctgccactgc ccacctggtt tccaaggctc caactgtgag aagagggtgg accggtgcag 1080 cctgcagcca tgccgcaatg gcggactctg cctggacctg ggccacgccc tgcgctgccg 1140 ctgccgcgcc ggcttcgcgg gtcctcgctg cgagcacgac ctggacgact gcgcqqqccq 1200 cgcctgcgct aacggcggca cgtgtgtgga gggcggcggc gcgcaccqct qctcctqcgc 1260 gctgggcttc ggcggccgcg actgccgcga gcgcgcggac ccgtgcgccg cgcgccctg 1320 tgctcacggc ggccgctgct acgcccactt ctccggcctc gtctgcgctt gcgctcccgg 1380 ctacatggga gcgcggtgtg agttcccagt gcaccccgac ggcgcaageg ccttgcccgc 1440 ggccccgccg ggcctcaggc ccggggaccc tcagcgctac cttttgcctc cggctctggg 1500 actgctcgtg gccgcggcg tggccggcgc tgcgctcttg ctggtccacg tgcgccgccg 1560 tggccactcc caggatgctg ggtctcgctt gctggctggg accccggagc cgtcagtcca 1620 cgcactcccg gatgcactca acaacctaag gacgcaggag ggttccgggg atggtccgag 1680 ctcgtccgta gattggaatc gccctgaaga tgtagaccct caagggattt atgtcatatc 1740 tgctccttcc atctacgctc gggaggtagc gacgcccctt ttccccccgc tacacactgg 1800 gcgcgctggg Cagaggcagc acctgctttt tccctaccct tcctcgattc tgtccgtgaa 1860 atgaattggg tagagtctct ggaaggtttt aagcccattt tcagttctaa cttactttca 1920 tectattttg catecetett ategttttga getacetgee atettetett t 1971

```
<210> 31
<211> 618
<212> PRT
```

<400>

<220> <221> misc_feature <223> Delta like 3 (Notch ligand)

Met Val Ser Pro Arg Met Ser Gly Leu Leu Ser Gln Thr Val Ile Leu 1 5 10 15

Ala Leu Ile Phe Leu Pro Gln Thr Arg Pro Ala Gly Val Phe Glu Leu 20 25 30

Gln Ile His Ser Phe Gly Pro Gly Pro Gly Ala Pro Arg Ser 35 40 45

Pro Cys Ser Ala Arg Leu Pro Cys Arg Leu Phe Phe Arg Val Cys Leu 50 55 60

Lys Pro Gly Leu Ser Glu Glu Ala Ala Glu Ser Pro Cys Ala Leu Gly 65 70 75 80

Ala Ala Leu Ser Ala Arg Gly Pro Val Tyr Thr Glu Gln Pro Gly Ala

<213> Homo sapiens

95

39467A.txt.txt 90

85

Pro Ala Pro Asp Leu Pro Leu Pro Asp Gly Leu Leu Gln Val Pro Phe
100 105 110

Arg Asp Ala Trp Pro Gly Thr Phe Ser Phe Ile Ile Glu Thr Trp Arg 115 120 125

Glu Glu Leu Gly Asp Gln Ile Gly Gly Pro Ala Trp Ser Leu Leu Ala 130 135 140

Arg Val Ala Gly Arg Arg Arg Leu Ala Ala Gly Gly Pro Trp Ala Arg 145 150 155 160

Asp Ile Gln Arg Ala Gly Ala Trp Glu Leu Arg Phe Ser Tyr Arg Ala 165 170 175

Arg Cys Glu Pro Pro Ala Val Gly Thr Ala Cys Thr Arg Leu Cys Arg 180 185 190

Pro Arg Ser Ala Pro Ser Arg Cys Gly Pro Gly Leu Arg Pro Cys Ala 195 200 205

Pro Leu Glu Asp Glu Cys Glu Ala Pro Leu Val Cys Arg Ala Gly Cys 210 220

Ser Pro Glu His Gly Phe Cys Glu Gln Pro Gly Glu Cys Arg Cys Leu 225 230 235 240

Glu Gly Trp Thr Gly Pro Leu Cys Thr Val Pro Val Ser Thr Ser Ser 245 250 255

Cys Leu Ser Pro Arg Gly Pro Ser Ser Ala Thr Thr Gly Cys Leu Val 260 265 270

Pro Gly Pro Gly Pro Cys Asp Gly Asn Pro Cys Ala Asn Gly Gly Ser 275 280 285

Cys Ser Glu Thr Pro Arg Ser Phe Glu Cys Thr Cys Pro Arg Gly Phe 290 295 300

Tyr Gly Leu Arg Cys Glu Val Ser Gly Val Thr Cys Ala Asp Gly Pro 305 310 315 320

Cys Phe Asn Gly Gly Leu Cys Val Gly Gly Ala Asp Pro Asp Ser Ala 325 330 335

Tyr Ile Cys His Cys Pro Pro Gly Phe Gln Gly Ser Asn Cys Glu Lys 340 345 350

Arg Val Asp Arg Cys Ser Leu Gln Pro Cys Arg Asn Gly Gly Leu Cys

39467A.txt.txt 360 36

355

Leu Asp Leu Gly His Ala Leu Arg Cys Arg Cys Arg Ala Gly Phe Ala 370 375 380

Gly Pro Arg Cys Glu His Asp Leu Asp Asp Cys Ala Gly Arg Ala Cys 385 390 395

Ala Asn Gly Gly Thr Cys Val Glu Gly Gly Gly Ala His Arg Cys Ser 405 410 415

Cys Ala Leu Gly Phe Gly Gly Arg Asp Cys Arg Glu Arg Ala Asp Pro 420 425 430

Cys Ala Ala Arg Pro Cys Ala His Gly Gly Arg Cys Tyr Ala His Phe 435 440 445

Ser Gly Leu Val Cys Ala Cys Ala Pro Gly Tyr Met Gly Ala Arg Cys 450 460

Glu Phe Pro Val His Pro Asp Gly Ala Ser Ala Leu Pro Ala Ala Pro 465 470 475 480

Pro Gly Leu Arg Pro Gly Asp Pro Gln Arg Tyr Leu Leu Pro Pro Ala 485 490 495

Leu Gly Leu Leu Val Ala Ala Gly Val Ala Gly Ala Ala Leu Leu Leu 500 505 510

Val His Val Arg Arg Gly His Ser Gln Asp Ala Gly Ser Arg Leu 515 520 525

Leu Ala Gly Thr Pro Glu Pro Ser Val His Ala Leu Pro Asp Ala Leu 530 540

Asn Asn Leu Arg Thr Gln Glu Gly Ser Gly Asp Gly Pro Ser Ser 545 550 555

Val Asp Trp Asn Arg Pro Glu Asp Val Asp Pro Gln Gly Ile Tyr Val 565 570 575

Ile Ser Ala Pro Ser Ile Tyr Ala Arg Glu Val Ala Thr Pro Leu Phe 580 585 590

Pro Pro Leu His Thr Gly Arg Ala Gly Gln Arg Gln His Leu Leu Phe 595 600 605

Pro Tyr Pro Ser Ser Ile Leu Ser Val Lys 610 615

<210> 32

<211> 3383 <212> DNA <213> Homo sapiens

<220> <221> misc_feature

<223> Delta like 4 (Notch ligand)

<400> gctgcgcgca ggccgggaac acgaggccaa gagccgcagc cccagccgcc ttggtgcagc 60 . gtacaccggc actagcccgc ttgcagcccc aggattagac agaagacgcg tcctcggcgc 120 ggtcgccgcc cagccgtagt cacctggatt acctacagcg gcagctgcag cggagccagc 180 gagaaggcca aaggggagca gcgtcccgag aggagcgcct cttttcaggg accccgccgg 240 ctggcggacg cgcgggaaag cggcgtcgcg aacagagcca gattgagggc ccgcgggtgg 300 agagagcgac gcccgagggg atggcggcag cgtcccggag cgcctctqqc tqqqcqctac 360 tgctgctggt ggcactttgg cagcagcgcg cggccggctc cggcgtcttc cagctqcaqc 420 tgcaggagtt catcaacgag cgcggcgtac tggccagtgg gcggccttgc gagcccqqct 480 gccggacttt cttccgcgtc tgccttaagc acttccaggc qqtcqtctcq cccqgaccct 540 gcaccttcgg gaccgtctcc acgccggtat tgggcaccaa ctccttcgct gtccgggacg 600 acagtagcgg cggggggcgc aaccctctcc aactgccctt caatttcacc tggccgggta 660 ccttctcgct catcatcgaa gcttggcacg cgccaggaga cgacctgcgg ccagaggcct 720 tgccaccaga tgcactcatc agcaagatcg ccatccaggg ctccctagct gtgggtcaga 780 actggttatt ggatgagcaa accagcaccc tcacaaqqct qcqctactct taccqqqtca 840 tctgcagtga caactactat ggagacaact gctcccgcct gtgcaaqaag cgcaatqacc 900 acttcggcca ctatgtgtgc cagccagatg gcaacttgtc ctgcctgccc ggttggactg 960 gggaatattg ccaacagcct atctgtcttt cgggctgtca tgaacagaat ggctactgca 1020 gcaagccagc agagtgcctc tgccgcccag gctggcaggg ccggctgtgt aacgaatgca 1080 tccccacaa tggctgtcgc cacggcacct gcagcactcc ctggcaatgt acttgtgatg 1140 agggctgggg aggcctgttt tgtgaccaag atctcaacta ctgcacccac cactccccat 1200 gcaagaatgg ggcaacgtgc tccaacagtg ggcagcgaag ctacacctgc acctgtcqcc 1260 caggctacac tggtgtggac tgtgagctgg agctcagcga gtgtgacagc aacccctgtc 1320 gcaatggagg cagctgtaag gaccaggagg atggctacca ctgcctgtgt cctccgggct 1380 actatggcct gcattgtgaa cacagcacct tgagctgcgc cgactccccc tgcttcaatg 1440 ggggctcctg ccgggagcgc aaccaggggg ccaactatgc ttgtgaatgt cccccaact 1500 tcaccggctc caactgcgag aagaaagtgg acaggtgcac cagcaacccc tgtgccaacg 1560 ggggacagtg cctgaaccga ggtccaagcc gcatgtgccg ctgccgtcct ggattcacgg 1620

1680

1740

gcacctactg tgaactccac gtcagcgact gtgcccgtaa cccttgcgcc cacggtqqca

cttgccatga cctggagaat gggctcatgt qcacctqccc tqccggcttc tctgqccqac

```
39467A.txt.txt
 gctgtgaggt gcggacatcc atcgatgcct gtgcctcgag tccctgcttc aacagggcca
                                                                   1800
 cctgctacac cgacctctcc acagacacct ttgtgtgcaa ctgcccttat ggctttgtgg
                                                                   1860
 gcagccgctg cgagttcccc gtgggcttgc cgcccagctt cccctgggtg gccgtctcgc
                                                                   1920
 toggtgtggg gctggcagtg ctgctggtac tgctgggcat ggtggcagtg gctgtgcggc
                                                                   1980
 agctgcggct tcgacggccg gacgacggca gcagggaagc catgaacaac ttgtcggact
                                                                   2040
 tccagaagga caacctgatt cctgccgccc agcttaaaaa cacaaaccag aagaaggagc
                                                                   2100
 tggaagtgga ctgtggcctg gacaagtcca actgtggcaa acagcaaaac cacacattgg
                                                                   2160
 actataatct ggccccaggg cccctggggc gggggaccat gccaggaaag tttccccaca
                                                                   2220
gtgacaagag cttaggagag aaggcgccac tgcggttaca cagtgaaaag ccagagtgtc
                                                                   2280
ggatatcagc gatatgctcc cccagggact ccatgtacca gtctgtgtgt ttgatatcag
                                                                   2340
aggagaggaa tgaatgtgtc attgccacgg aggtataagg caggagccta cctggacatc
                                                                   2400
cctgctcagc cccgcggctg gaccttcctt ctgcattgtt tacattgcat cctggatggg
                                                                   2460
acgtttttca tatgcaacgt gctgctctca ggaggaggag ggaatggcag gaaccggaca
                                                                   2520
gactgtgaac ttgccaagag atgcaatacc cttccacacc tttgggtgtc tgtctggcat
                                                                   2580
2640
ccctgccagt agtggccttc agggggctcc ttccggggct ccggcctgtt ttccagagag
                                                                   2700
agtggcagta gccccatggg gcccggagct gctgtggcct ccactggcat ccgtgtttcc
                                                                   2760
aaaaqtgcct ttggcccagg ctccacggcg acagttgggc ccaaatcaga aaggagaga
                                                                   2820
ggggccaatg agggcagggc ctcctgtggg ctggaaaacc actgggtgcg tctcttgctg
                                                                   2880
gggtttgccc tggaggtgag gtgagtgctc gagggagggg agtgctttct gccccatgcc
                                                                   2940
tccaactact gtatgcaggc ctggctctct ggtctaggcc ctttgggcaa gaatgtccgt
                                                                   3000
ctacccggct tccaccaccc tctggccctg ggcttctgta agcagacagg cagagggcct
                                                                   3060
gcccctccca ccagccaagg gtgccaggcc taactggggc actcagggca gtgtgttgga
                                                                  3120
aattccactg agggggaaat caggtgctgc ggccgcctgg gccctttcct ccctcaagcc
                                                                  3180
catctccaca acctcgagcc tgggctctgg tccactactg ccccagacca ccctcaaagc
                                                                  3240
tggtcttcag aaatcaataa tatgagtttt tattttgttt ttttttttt ttttgtagtt
                                                                  3300
tattttggag tctagtattt caataattta agaatcagaa gcactgacct ttctacattt
                                                                  3360
                                                                  3383
tataacatta ttttgtatat aat
```

```
<210> 33
<211> 685
<212> PRT
<213> Homo sapiens
```

<220> <221> misc_feature <223> Delta like 4 (Notch ligand) <400> 33

Met Ala Ala Ser Arg Ser Ala Ser Gly Trp Ala Leu Leu Leu 10 15 Val Ala Leu Trp Gln Gln Arg Ala Gly Ser Gly Val Phe Gln Leu 20 25 30 Gln Leu Gln Glu Phe Ile Asn Glu Arg Gly Val Leu Ala Ser Gly Arg 35 40 45 Pro Cys Glu Pro Gly Cys Arg Thr Phe Phe Arg Val Cys Leu Lys His 50 55 60 Phe Gln Ala Val Val Ser Pro Gly Pro Cys Thr Phe Gly Thr Val Ser 65 70 75 80 Thr Pro Val Leu Gly Thr Asn Ser Phe Ala Val Arg Asp Asp Ser Ser 90 95 Gly Gly Arg Asn Pro Leu Gln Leu Pro Phe Asn Phe Thr Trp Pro 100 105 110 Gly Thr Phe Ser Leu Ile Ile Glu Ala Trp His Ala Pro Gly Asp Asp 115 120 125 Leu Arg Pro Glu Ala Leu Pro Pro Asp Ala Leu Ile Ser Lys Ile Ala 130 135 140 Ile Gln Gly Ser Leu Ala Val Gly Gln Asn Trp Leu Leu Asp Glu Gln 145 150 155 160 Thr Ser Thr Leu Thr Arg Leu Arg Tyr Ser Tyr Arg Val Ile Cys Ser 165 170 175 Asp Asn Tyr Tyr Gly Asp Asn Cys Ser Arg Leu Cys Lys Lys Arg Asn 180 185 Asp His Phe Gly His Tyr Val Cys Gln Pro Asp Gly Asn Leu Ser Cys 195 200 205 Leu Pro Gly Trp Thr Gly Glu Tyr Cys Gln Gln Pro Ile Cys Leu Ser 210 215 220 Gly Cys His Glu Gln Asn Gly Tyr Cys Ser Lys Pro Ala Glu Cys Leu 225 230 235 240 Cys Arg Pro Gly Trp Gln Gly Arg Leu Cys Asn Glu Cys Ile Pro His 245 250 255 Asn Gly Cys Arg His Gly Thr Cys Ser Thr Pro Trp Gln Cys Thr Cys 260 265 270

Asp Glu Gly Trp Gly Gly Leu Phe Cys Asp Gln Asp Leu Asn Tyr Cys 275 280 285

Thr His His Ser Pro Cys Lys Asn Gly Ala Thr Cys Ser Asn Ser Gly 290 295 300

Gln Arg Ser Tyr Thr Cys Thr Cys Arg Pro Gly Tyr Thr Gly Val Asp 305 310 315

Cys Glu Leu Glu Leu Ser Glu Cys Asp Ser Asn Pro Cys Arg Asn Gly 325 330 335

Gly Ser Cys Lys Asp Gln Glu Asp Gly Tyr His Cys Leu Cys Pro Pro 340 345 350

Gly Tyr Tyr Gly Leu His Cys Glu His Ser Thr Leu Ser Cys Ala Asp 355 360 365

Ser Pro Cys Phe Asn Gly Gly Ser Cys Arg Glu Arg Asn Gln Gly Ala 370 375 380

Asn Tyr Ala Cys Glu Cys Pro Pro Asn Phe Thr Gly Ser Asn Cys Glu 385 390 395

Lys Lys Val Asp Arg Cys Thr Ser Asn Pro Cys Ala Asn Gly Gly Gln
405 410 415

Cys Leu Asn Arg Gly Pro Ser Arg Met Cys Arg Cys Arg Pro Gly Phe 420 430

Thr Gly Thr Tyr Cys Glu Leu His Val Ser Asp Cys Ala Arg Asn Pro
435 440 445

Cys Ala His Gly Gly Thr Cys His Asp Leu Glu Asn Gly Leu Met Cys 450 460

Thr Cys Pro Ala Gly Phe Ser Gly Arg Arg Cys Glu Val Arg Thr Ser 465 470 475 480

Ile Asp Ala Cys Ala Ser Ser Pro Cys Phe Asn Arg Ala Thr Cys Tyr 485 490 495

Thr Asp Leu Ser Thr Asp Thr Phe Val Cys Asn Cys Pro Tyr Gly Phe 500 505 510

Val Gly Ser Arg Cys Glu Phe Pro Val Gly Leu Pro Pro Ser Phe Pro 515 520 525

Trp Val Ala Val Ser Leu Gly Val Gly Leu Ala Val Leu Leu Val Leu 530 540

480

540

600

39467A.txt.txt

									39	46/A	.txt	.τχτ					
•	Leu 545	GΊу	Met	val	Аlа	Val 550	Аla	val	Arg	Gln	Leu 555	Arg	Leu	Arg	Arg	Pro 560	
	Asp	Asp	Glу	ser	Arg 565	Glu	Ala	Met	Asn	Asn 570	Leu	Ser	Asp	Phe	G]n 575	Lys	
	Asp	Asņ	Leu	11e 580	Pro	Аlа	Аla	Gln	Leu 585	Lys	Asn	Thr	Asn	G]n 590	Lys	Lys	
	Glu	Leu	Glu 595	val	Asp	Cys	Gly	Leu 600	Asp	Lys	Ser	Asn	Cys 605	Gly	Lys	Gln	
	Gln	Asn 610	His	Thr	Leu	Asp	Tyr 615	Asn	Leu	Ala	Pro	Gly 620	Pro	Leu	Gly	-Arg-	
	G]y 625	Thr	Met	Pro	Gly	Lys 630	Phe	Pro	His	Ser	Asp 635	Lys	Ser	Leu	Glу	G]u 640	
	Lys	Αla	Pro	Leu	Arg 645	Leu	His	ser	Glu	Lys 650	Pro	Glu	Cys	Arg	Ile 655	ser	
	Ala	Ile	Cys	ser 660	Pro	Arg	Asp	ser	меt 665	Туг	Gln	Ser	٧a٦	Cys 670	Leu	Ile	
	Ser	Glu	G1u 675	Arg	Asn	Glu	Cys	Va7 680	Ile	Ala	Thr	Glu	va1 685				
<210> 34 <211> 5077 <212> DNA <213> Homo sapiens																	
	<220> <221> misc_feature <223> Jagged2, transcript variant 1																
	<400)> 3	34 1	ucac	natar	מ כנ	aata	aacaa	a ato	aaco	aac	gage	ctato	cag	tctc	gttccg	60
																cgctgc	120
																gcggcc	180
																gccgcg	240
																ctgcct	300
																gccggg	360
																agggcc	420
	cycy	9909	اعر ا	3-36	שפטי	,,	יבבכ-	-၁၁၁`	993	, 5	ر د د			- -	-		

ccatgggcta tttcgagctg cagctgagcg cgctgcggaa cgtgaacggg gagctgctga

gcggcgcctg ctgtgacggc gacggccgga caacgcgcgc ggggggctgc ggccacgacg

agtgcgacac g	gtacgtgcgc	gtgtgcctta	39467A.txt aggagtacca		acgcccacgg	660
ggccctgcag (tacggccac	ggcgccacgc	ccgtgctggg	gcgcaactcc	ttctacctgc	720
cgccggcggg	gctgcgggg	gaccgagcgc	gggcgcgggc	: ccgggccggc	ggcgaccagg	780
acccgggcct (gtcgtcatc	cccttccagt	tcgcctggcc	gcgctccttt	accctcatcg	840
tggaggcctg g	gactgggac	aacgatacca	ccccgaatga	ggagctgctg	atcgagcgag	900
tgtcgcatgc o	ggcatgatc	aacccggagg	accgctggaa	gagcctgcac	ttcagcggcc	960
acgtggcgca c	ctggagctg	cagatccgcg	tgcgctgcga	cgagaactac	tacagcgcca	1020
cttgcaacaa g	ttctgccgg	cccgcaacg	actttttcgg	ccactacacc	tgcgaccagt	1080
acggcaacaa g	gcctgcatg	gacggctgga	tgggcaagga	gtgcaaggaa	gctgtgtgta	1140
aacaagggtg t	aatttgctc	cacgggggat	gcaccgtgcc	tggggagtgc	aggtgcagct	1200
acggctggca a	gggaggttc	tgcgatgagt	gtgtccccta	ccccggctgc	gtgcatggca	1260
gttgtgtgga g	ccctggcag	tgcaactgtg	agaccaactg	gggcggcctg	ctctgtgaca	1320
aagacctgaa c	tactgtggc	agccaccacc	cctgcaccaa	cggaggcacg	tgcatcaacg	1380
ccgagcctga c	cagtaccgc	tgcacctgcc	ctgacggcta	ctcgggcagg	aactgtgaga	1440
aggctgagca c	gcctgcacc	tccaacccgt	gtgccaacgg	gggctcttgc	catgaggtgc	1500
cgtccggctt c	gaatgccac	tgcccatcgg	gctggagcgg	gcccacctgt	gcccttgaca	1560
tcgatgagtg t	gcttcgaac	ccgtgtgcgg	ccggtggcac	ctgtgtggac	caggtggacg	1620
gctttgagtg c	atctgcccc	gagcagtggg	tgggggccac	ctgccagctg	gacgccaatg	1680
agtgtgaagg ga	aagccatgc	cttaacgctt	tttcttgcaa	aaacctgatt	ggcggctatt	1740
actgtgattg ca	atcccgggc	tggaagggca	tcaactgcca	tatcaacgtc	aacgactgtc	1800
gcgggcagtg to	cagcatggg	ggcacctgca	aggacctggt	gaacgggtac	cagtgtgtgt	1860
gcccacgggg ct	ttcggaggc	cggcattgcg	agctggaacg	agacgagtgt	gccagcagcc	1920
cctgccacag co	ggcggcctc	tgcgaggacc	tggccgacgg	cttccactgc	cactgccccc	1980
agggcttctc cg	ggcctctc	tgtgaggtgg	atgtcgacct	ttgtgagcca	agcccctgcc	2040
ggaacggcgc to	gctgctat a	aacctggagg	gtgactatta	ctgcgcctgc	cctgatgact	2100
ttggtggcaa ga	actgctcc g	gtgccccgcg	agccgtgccc	tggcggggcc	tgcagagtga	2160
tcgatggctg cg	ggtcagac g	gcggggcctg	ggatgcctgg	cacagcagcc	tccggcgtgt	2220
gtggccccca tg	gacgctgc g	gtcagccagc	cagggggcaa	cttttcctgc	atctgtgaca	2280
gtggctttac tg	gcacctac t	gccatgaga	acattgacga	ctgcctgggc	cagccctgcc	2340
gcaatggggg ca	catgcatc g	atgaggtgg	acgccttccg	ctgcttctgc	cccagcggct	2400
gggagggcga gc	tctgcgac a	ccaatccca	acgactgcct	tcccgatccc	tgccacagcc	2460
gcggccgctg ct	acgacctg g	tcaatgact ·	tctactgtgc	gtgcgacgac	ggctggaagg	2520
gcaagacctg cc	actcacgc g	agttccagt (gcgatgccta	cacctgcagc	aacggtggca	2580
cctgctacga ca	gcggcgac a	ccttccgct (gcgcctgccc	ccccggctgg	aagggcagca	2640

39467A.txt.txt cctgcgccgt cgccaagaac agcagctgcc tgcccaaccc ctgtgtgaat ggtggcacct 2700 gcgtgggcag cggggcctcc ttctcctgca tctgccggga cggctgggag ggtcgtactt 2760 gcactcacaa taccaacgac tgcaaccctc tgccttgcta caatggtggc atctgtgt 2820 acggcgtcaa ctggttccgc tgcgagtgtg cacctggctt cgcggggcct gactgccgca 2880 tcaacatcga cgagtgccag tcctcgccct gtgcctacgg ggccacgtgt gtggatgaga 2940 tcaacgggta tcgctgtagc tgcccacccg gccgagccgg cccccggtgc caggaagtga 3000 tcgggttcgg gagatcctgc tggtcccggg gcactccgtt cccacacgga agctcctggg 3060 tggaagactg caacagctgc cgctgcctgg atggccgccg tgactgcagc aaggtgtggt 3120 gcggatggaa gccttgtctg ctggccggcc agcccgaggc cctgagcgcc cagtgcccac 3180 tggggcaaag gtgcctggag aaggccccag gccagtgtct gcgaccaccc tgtgaggcct 3240 ggggggagtg cggcgcagaa gagccaccga gcacccctg cctgccacgc tccggccacc 3300 tggacaataa ctgtgcccgc ctcaccttgc atttcaaccg tgaccacgtg ccccagggca 3360 ccacggtggg cgccatttgc tccgggatcc gctccctgcc agccacaagg gctgtggcac 3420 gggaccgcct gctggtgttg ctttgcgacc gggcgtcctc gggggccagt gccgtggagg 3480 tggccgtgtc cttcagccct gccagggacc tgcctgacag cagcctgatc cagggcgcgg 3540 cccacgccat cgtggccgcc atcacccagc gggggaacag ctcactgctc ctggctgtca 3600 ccgaggtcaa ggtggagacg gttgttacgg gcggctcttc cacaggtctg ctggtgcctg 3660 tgctgtgtgg tgccttcagc gtgctgtggc tggcgtgcgt ggtcctgtgc gtgtggtgga 3720 cacgcaagcg caggaaagag cgggagagga gccggctgcc gcgggaggag agcgccaaca 3780 accagtgggc cccgctcaac cccatccgca accccatcga gcggccgggg ggccacaagg 3840 3900 acgtgctcta ccagtgcaag aacttcacgc cgccgccgcg cagggcggac gaggcgctgc ccgggccggc cggccacgcg gccgtcaggg aggatgagga ggacgaggat ctgggccgcg 3960 gtgaggagga ctccctggag gcggagaagt tcctctcaca caaattcacc aaagatcctg 4020 gccgctcgcc ggggaggccg gcccactggg cctcaggccc caaagtggac aaccgcgcgg 4080 4140 tcaggagcat caatgaggcc cgctacgccg gcaaggagta ggggcggctg ccagctgggc cgggacccag ggccctcggt gggagccatg ccgtctgccg gacccggagg ccgaggccat 4200 gtgcatagtt tctttatttt gtgtaaaaaa accaccaaaa acaaaaacca aatgtttatt 4260 ttctacgttt ctttaacctt gtataaatta ttcagtaact gtcaggctga aaacaatgga 4320 gtattctcgg atagttgcta tttttgtaaa gtttccgtgc gtggcactcg ctgtatgaaa 4380 4440 ggagagagca aagggtgtct gcgtcgtcac caaatcgtag cgtttgttac cagaggttgt gcactgttta cagaatcttc cttttattcc tcactcgggt ttctctgtgg ctccaggcca 4500 4560 aagtgccggt gagacccatg gctgtgttgg tgtggcccat ggctgttggt gggacccgtg gctgatggtg tggcctgtgg ctgtcggtgg gactcgtggc tgtcaatggg acctgtggct 4620 gtcggtggga cctacggtgg tcggtgggac cctggttatt gatgtggccc tggctgccgg 4680

cacggcccgt ggctgttgac gcacctgtgg ttgttagtgg ggcctgaggt catcggcgtg 4740 gcccaaggcc ggcaggtcaa cctcgcgctt gctggccagt ccaccctgcc tgccgtctgt 4800 gcttcctcct gcccagaacg cccgctccag cgatctctc actgtgcttt cagaagtgcc 4860 cttcctgctg cgcagttctc ccatcctggg acggcggcag tattgaagct cgtgacaagt 4920 gccttcacac agacccctcg caactgtcca cgcgtgccgt ggcaccaggc gctgcccacc 4980 tgccggcccc ggccgccct cctcgtgaaa gtgcatttt gtaaatgtgt acatattaaa 5040 ggaagcactc tgtatattg attgaataat gccacca 5077

<210> 35 <211> 1238 <212> PRT

<213> Homo sapiens

<220>

<221> misc_feature <223> Jagged2, transcript variant 1

<400> 35

Met Arg Ala Gln Gly Arg Gly Arg Leu Pro Arg Arg Leu Leu Leu 10 15

Leu Ala Leu Trp Val Gln Ala Ala Arg Pro Met Gly Tyr Phe Glu Leu 20 25 30

Gln Leu Ser Ala Leu Arg Asn Val Asn Gly Glu Leu Leu Ser Gly Ala 35 40 45

Cys Cys Asp Gly Asp Gly Arg Thr Thr Arg Ala Gly Gly Cys Gly His 50 55 60

Asp Glu Cys Asp Thr Tyr Val Arg Val Cys Leu Lys Glu Tyr Gln Ala 65 70 75 80

Lys Val Thr Pro Thr Gly Pro Cys Ser Tyr Gly His Gly Ala Thr Pro 85 90 95

Val Leu Gly Gly Asn Ser Phe Tyr Leu Pro Pro Ala Gly Ala Ala Gly 100 105 110

Asp Arg Ala Arg Ala Arg Ala Gly Gly Asp Gln Asp Pro Gly 115 120

Leu Val Val Ile Pro Phe Gln Phe Ala Trp Pro Arg Ser Phe Thr Leu 130 135 140

Ile Val Glu Ala Trp Asp Trp Asp Asn Asp Thr Thr Pro Asn Glu Glu 145 150 155 160

Leu Leu Ile Glu Arg Val Ser His Ala Gly Met Ile Asn Pro Glu Asp

165

175

Arg Trp Lys Ser Leu His Phe Ser Gly His Val Ala His Leu Glu Leu 180 185 190 Gln Ile Arg Val Arg Cys Asp Glu Asn Tyr Tyr Ser Ala Thr Cys Asn 195 200 205 Lys Phe Cys Arg Pro Arg Asn Asp Phe Phe Gly His Tyr Thr Cys Asp 210 215 220 Gln Tyr Gly Asn Lys Ala Cys Met Asp Gly Trp Met Gly Lys Glu Cys 235 230 235 240 Lys Glu Ala Val Cys Lys Gln Gly Cys Asn Leu Leu His Gly Gly Cys 245 250 255 Thr Val Pro Gly Glu Cys Arg Cys Ser Tyr Gly Trp Gln Gly Arg Phe 260 265 270 Cys Asp Glu Cys Val Pro Tyr Pro Gly Cys Val His Gly Ser Cys Val 275 280 285 Glu Pro Trp Gln Cys Asn Cys Glu Thr Asn Trp Gly Gly Leu Leu Cys 290 295 300 Asp Lys Asp Leu Asn Tyr Cys Gly Ser His His Pro Cys Thr Asn Gly 305 310 315 320 Gly Thr Cys Ile Asn Ala Glu Pro Asp Gln Tyr Arg Cys Thr Cys Pro 325 330 335 Asp Gly Tyr Ser Gly Arg Asn Cys Glu Lys Ala Glu His Ala Cys Thr 340 345 350 Ser Asn Pro Cys Ala Asn Gly Gly Ser Cys His Glu Val Pro Ser Gly 355 360 365 Phe Glu Cys His Cys Pro Ser Gly Trp Ser Gly Pro Thr Cys Ala Leu 370 375 380 Asp Ile Asp Glu Cys Ala Ser Asn Pro Cys Ala Ala Gly Gly Thr Cys 385 390 395 400 Val Asp Gln Val Asp Gly Phe Glu Cys Ile Cys Pro Glu Gln Trp Val 405 410 415 Gly Ala Thr Cys Gln Leu Asp Ala Asn Glu Cys Glu Gly Lys Pro Cys 420 425 430 Leu Asn Ala Phe Ser Cys Lys Asn Leu Ile Gly Gly Tyr Tyr Cys Asp

435

Ile Pro Gly Trp Lys Gly Ile Asn Cys His Ile Asn Val Asn Asp
450 455 460 Cys Arg Gly Gln Cys Gln His Gly Gly Thr Cys Lys Asp Leu Val Asn 465 470 475 480 Gly Tyr Gln Cys Val Cys Pro Arg Gly Phe Gly Gly Arg His Cys Glu 485 490 495 Leu Glu Arg Asp Glu Cys Ala Ser Ser Pro Cys His Ser Gly Gly Leu 500 505 510 Cys Glu Asp Leu Ala Asp Gly Phe His Cys His Cys Pro Gln Gly Phe 515 520 525 Ser Gly Pro Leu Cys Glu Val Asp Val Asp Leu Cys Glu Pro Ser Pro 530 535 540 Cys Arg Asn Gly Ala Arg Cys Tyr Asn Leu Glu Gly Asp Tyr Tyr Cys 545 550 555 560 Ala Cys Pro Asp Asp Phe Gly Gly Lys Asn Cys Ser Val Pro Arg Glu
565 570 575 Pro Cys Pro Gly Gly Ala Cys Arg Val Ile Asp Gly Cys Gly Ser Asp 580 585 Ala Gly Pro Gly Met Pro Gly Thr Ala Ala Ser Gly Val Cys Gly Pro 595 600 605 His Gly Arg Cys Val Ser Gln Pro Gly Gly Asn Phe Ser Cys Ile Cys 610 620 Asp Ser Gly Phe Thr Gly Thr Tyr Cys His Glu Asn Ile Asp Asp Cys 625 630 635 Leu Gly Gln Pro Cys Arg Asn Gly Gly Thr Cys Ile Asp Glu Val Asp 645 650 655 Ala Phe Arg Cys Phe Cys Pro Ser Gly Trp Glu Gly Glu Leu Cys Asp 660 665 670 Thr Asn Pro Asn Asp Cys Leu Pro Asp Pro Cys His Ser Arg Gly Arg 675 685 Cys Tyr Asp Leu Val Asn Asp Phe Tyr Cys Ala Cys Asp Asp Gly Trp 690 695 700 Lys Gly Lys Thr Cys His Ser Arg Glu Phe Gln Cys Asp Ala Tyr Thr

720

39467A.txt.txt 715

705

710

Cys Ser Asn Gly Gly Thr Cys Tyr Asp Ser Gly Asp Thr Phe Arg Cys
725 730 735

Ala Cys Pro Pro Gly Trp Lys Gly Ser Thr Cys Ala Val Ala Lys Asn 740 745 750

Ser Ser Cys Leu Pro Asn Pro Cys Val Asn Gly Gly Thr Cys Val Gly 755 760 765

Ser Gly Ala Ser Phe Ser Cys Ile Cys Arg Asp Gly Trp Glu Gly Arg
770 780

Thr Cys Thr His Asn Thr Asn Asp Cys Asn Pro Leu Pro Cys Tyr Asn 785 790 795 800

Gly Gly Ile Cys Val Asp Gly Val Asn Trp Phe Arg Cys Glu Cys Ala 805 810 815

Pro Gly Phe Ala Gly Pro Asp Cys Arg Ile Asn Ile Asp Glu Cys Gln 820 830

Ser Ser Pro Cys Ala Tyr Gly Ala Thr Cys Val Asp Glu Ile Asn Gly 835 840 845

Tyr Arg Cys Ser Cys Pro Pro Gly Arg Ala Gly Pro Arg Cys Gln Glu 850 855 860

Val Ile Gly Phe Gly Arg Ser Cys Trp Ser Arg Gly Thr Pro Phe Pro 865 870 880

His Gly Ser Ser Trp Val Glu Asp Cys Asn Ser Cys Arg Cys Leu Asp 885 890 895

Gly Arg Arg Asp Cys Ser Lys Val Trp Cys Gly Trp Lys Pro Cys Leu 900 905 910

Leu Ala Gly Gln Pro Glu Ala Leu Ser Ala Gln Cys Pro Leu Gly Gln 915 920 925

Arg Cys Leu Glu Lys Ala Pro Gly Gln Cys Leu Arg Pro Pro Cys Glu 930 940

Ala Trp Gly Glu Cys Gly Ala Glu Glu Pro Pro Ser Thr Pro Cys Leu 945 950 955 960

Pro Arg Ser Gly His Leu Asp Asn Asn Cys Ala Arg Leu Thr Leu His 965 970 975

Phe Asn Arg Asp His Val Pro Gln Gly Thr Thr Val Gly Ala Ile Cys

980

990

Ser Gly Ile Arg Ser Leu Pro Ala Thr Arg Ala Val Ala Arg Asp Arg 995 1000 1005

Leu Leu Val Leu Leu Cys Asp Arg Ala Ser Ser Gly Ala Ser Ala 1010 1015 1020

Val Glu Val Ala Val Ser Phe Ser Pro Ala Arg Asp Leu Pro Asp 1025 1030 1035

Ser Ser Leu Ile Gln Gly Ala Ala His Ala Ile Val Ala Ala Ile 1040 1045 1050

Thr Gln Arg Gly Asn Ser Ser Leu Leu Leu Ala Val Thr Glu Val 1055 1060 1065

Lys Val Glu Thr Val Val Thr Gly Gly Ser Ser Thr Gly Leu Leu 1070 1075 1080

Val Pro. Val Leu Cys Gly Ala Phe Ser Val Leu Trp Leu Ala Cys 1085 1090 1095

Val Val Leu Cys Val Trp Trp Thr Arg Lys Arg Arg Lys Glu Arg 1100 1105 1110

Glu Arg Ser Arg Leu Pro Arg Glu Glu Ser Ala Asn Asn Gln Trp 1115 1120 1125

Ala Pro Leu Asn Pro Ile Arg Asn Pro Ile Glu Arg Pro Gly Gly 1130 1140

His Lys Asp Val Leu Tyr Gln Cys Lys Asn Phe Thr Pro Pro Pro 1145 1150 1155

Arg Arg Ala Asp Glu Ala Leu Pro Gly Pro Ala Gly His Ala Ala 1160 1165 1170

Val Arg Glu Asp Glu Asp Glu Asp Leu Gly Arg Gly Glu Glu 1175 1180 1185

Asp Ser Leu Glu Ala Glu Lys Phe Leu Ser His Lys Phe Thr Lys 1190 1195 1200

Asp Pro Gly Arg Ser Pro Gly Arg Pro Ala His Trp Ala Ser Gly 1205 1210 1215

Pro Lys Val Asp Asn Arg Ala Val Arg Ser Ile Asn Glu Ala Arg 1220 1225 1230

Tyr Ala Gly Lys Glu

1235

<210>

36 2223 <211> DNA <213> Homo sapiens <220> misc_feature <221> Hey-1 tcaqtgtgtg cggaacgcaa gcagccgaga gcggagaggc gccgctgtag ttaactcctc 60 120 cctgcccgcc gcgccgaccc tccccaggaa cccccaggga gccagcatga agcgagctca ccccgagtac agctcctcgg acagcgagct ggacgagacc atcgaggtgg agaaggagag 180 tgcggacgag aatggaaact tgagttcggc tctaggttcc atgtccccaa ctacatcttc 240 300 ccagattttg gccagaaaaa gacggagagg aataattgag aagcgccgac gagaccggat 360 caataacagt ttgtctgagc tgagaaggct ggtacccagt gcttttgaga agcagggatc tgctaagcta gaaaaagccg agatcctgca gatgaccgtg gatcacctga aaatgctgca 420 tacggcagga gggaaaggtt actttgacgc gcacgccctt gctatggact atcggagttt 480 540 gggatttcgg gaatgcctgg cagaagttgc gcgttatctg agcatcattg aaggactaga 600 tgcctctgac ccgcttcgag ttcgactggt ttcgcatctc aacaactacg cttcccagcg 660 ggaagccgcg agcggcgccc acgcgggcct cggacacatt ccctggggga ccgtcttcgg 720 acatcacccq cacatcqcqc acccqctqtt gctgccccag aacggccacg ggaacgcggg caccacggcc tcacccacgg aaccgcacca ccagggcagg ctgggctcgg cacatccgga 780 840 ggcgcctgct ttgcgagcgc cccctagcgg cagcttcgga ccggtgctcc ctgtggtcac 900 ctccgcctcc aaactgtcgc tgcctctgct ctcctcagtg gcctccctgt cggccttccc 960 cttctctttc ggctccttcc acttactgtc tcccaatgca ctgagccctt cagcacccac 1020 gcaggctgca aaccttggca agccctatag accttggggg acggagatcg gagcttttta aagaactgat gtagaatgag ggaggggaaa gtttaaaatc ccagctgggc tggactgttg 1080 ccaacatcac cttaaagtcg tcagtaaaag taaaaaggaa aaaggtacac tttcagataa 1140 tttttttttt aaagactaaa ggtttgttgg tttactttta tctttttaa tgttttttc 1200 atcatgtcat gtattagcag tttttaaaaaa ctagttgtta aattttgttc aagacattaa 1260 attgaaatag tgagtataag ccaacacttt gtgataggtt tgtactgtgc ctaatttact 1320 1380 ttgtaaacca gaatgattcc gtttttgcct caaaatttgg ggaatcttaa catttaggta tttttggtct gtttttctcc ttgtatagtt atggtctgtt tttagaatta attttccaaa 1440 ccactatgct taatgttaac atgattctgt ttgttaatat tttgacagat taaggtgttg 1500 tataaataat attcttttgg ggggagggga actatattga attttatatt tctgagcaaa 1560 gcgttgacaa atcagatgat cagctttatc caagaaagaa gactagtaaa ttgtctgcct 1620

39467A.txt.txt cctatagcag aaaggtgaat gtacaaactg ttggtggcct gaatccatct gaccagctgc 1680 tggtatctgc caggactggc agttctgatt tagttaggag gaccgctgat aggttaggtc 1740 tcatttggag tgttggtgga aaggaaactg aaggtaattg aatagaatac gcctgcattt. 1800 accagcccca gcaacacaaa gaatttttaa tcacacggat ctcaaattca caaatgttaa 1860 catggataag tgatcatggt gtgcgagtgg tcaattgagt agtacagtgg aaactgttaa 1920 atgcataacc taattttcct gggactgcca tattttcttt taactggaaa tttttatgtg 1980 agttttcctt ttggtgcatg gaactgtggt tgccaaggta tttaaaaggg ctttcctgcc 2040 tccttctctt tgatttattt aatttgattt gggctataaa atatcatttt tcaggtttat 2100 tcttttagca ggtgtagtta aacgacctcc actgaactgg gtttgacctc tgttgtactg 2160 2220 2223 aaa

<210> 37 <211> 304

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Hey-1

<400> 37

Met Lys Arg Ala His Pro Glu Tyr Ser Ser Ser Asp Ser Glu Leu Asp 1 10 15

Glu Thr Ile Glu Val Glu Lys Glu Ser Ala Asp Glu Asn Gly Asn Leu 20 25 30

Ser Ser Ala Leu Gly Ser Met Ser Pro Thr Thr Ser Ser Gln Ile Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Ala Arg Lys Arg Arg Arg Gly Ile Ile Glu Lys Arg Arg Arg Asp Arg 50 55 60

Ile Asn Asn Ser Leu Ser Glu Leu Arg Arg Leu Val Pro Ser Ala Phe 65 70 75 80

Glu Lys Gln Gly Ser Ala Lys Leu Glu Lys Ala Glu Ile Leu Gln Met 85 90 95

Thr Val Asp His Leu Lys Met Leu His Thr Ala Gly Gly Lys Gly Tyr 100 105 110

Phe Asp Ala His Ala Leu Ala Met Asp Tyr Arg Ser Leu Gly Phe Arg 115 120 125

Glu Cys Leu Ala Glu Val Ala Arg Tyr Leu Ser Ile Ile Glu Gly Leu

180 240

300

39467A.txt.txt

130 135 Asp Ala Ser Asp Pro Leu Arg Val Arg Leu Val Ser His Leu Asn Asn 145 150 155 160 Tyr Ala Ser Gln Arg Glu Ala Ala Ser Gly Ala His Ala Gly Leu Gly
165 170 175 His Ile Pro Trp Gly Thr Val Phe Gly His His Pro His Ile Ala His 180 185 190 Pro Leu Leu Pro Gln Asn Gly His Gly Asn Ala Gly Thr Thr Ala 195 200 205 Ser Pro Thr Glu Pro His His Gln Gly Arg Leu Gly Ser Ala His Pro 210 215 220 Glu Ala Pro Ala Leu Arg Ala Pro Pro Ser Gly Ser Phe Gly Pro Val 225 230 235 240 Leu Pro Val Val Thr Ser Ala Ser Lys Leu Ser Leu Pro Leu Leu Ser 245 250 255 Ser Val Ala Ser Leu Ser Ala Phe Pro Phe Ser Phe Gly Ser Phe His 260 265 270 Leu Leu Ser Pro Asn Ala Leu Ser Pro Ser Ala Pro Thr Gln Ala Ala 275 280 285 Asn Leu Gly Lys Pro Tyr Arg Pro Trp Gly Thr Glu Ile Gly Ala Phe 290 295 300 38 2533 <210> <211> DNA Homo sapiens misc_feature <221> Hey-2 tcggcgtccg agcttccggc cgggctgtgc cccgcgcggt cttcgccggg atgaagcgcc 60 120 cctgcgagga gacgacctcc gagagcgaca tggacgagac catcgacgtg gggagcgaga

acaattactc ggggcaaagt actagctctg tgattagatt gaattctcca acaacaacat

ctcagattat ggcaagaaag aaaaggagag ggattataga gaaaaggcgt cgggatcgga

			•.			
taggattcc	g agagtgccta	a acagaagtt <u>c</u>	39467A.txt cgcggtacct		gaaggcctgg	480
actcctcgga	tccgctgcgg	gtgcggcttg	tgtctcatct	cagcacttgc	gccacccagc	540
gggaggcgg	ggccatgaca	tcctccatgg	cccaccacca	tcatccgctc	cacccgcatc	600
actgggccgc	cgccttccad	cacctgcccg	cagccctgct	ccagcccaac	ggcctccatg	660
cctcagagto	aaccccttgt	cgcctctcca	caacttcaga	agtgcctcct	gcccacggct	720
ctgctctcct	cacggccacg	tttgcccatg	cggattcagc	cctccgaatg	ccatccacgg	780
gcagcgtcgc	cccctgcgtg	ccacctctct	ccacctctct	cttgtccctc	tctgccaccg	840
tccacgccgc	agccgcagca	gccaccgcgg	ctgcacacag	cttccctctg	tccttcgcgg	900
gggcattccc	catgcttccc	ccaaacgcag	cagcagcagt	ggccgcggcc	acagccatca	960
gcccgccctt	gtcagtatca	gccacgtcca	gtcctcagca	gaccagcagt	ggaacaaaca	1020
ataaacctta	ccgaccctgg	gggacagaag	ttggagcttt	ttaaattttt	cttgaacttc	1080
ttgcaatagt	aactgaatgt	cctccatttc	agagtcagct	taaaacctct	gcaccctgaa	1140
ggtagccata	cagatgccga	cagatccaca	aaggaacaat	aaagctattt	gagacacaaa	1200
cctcacgagt	ggaaatgtgg	tattctcttt	tttttctctc	ccttttttgt	ttggttcaag	1260
gcagctcggt	aactgacatc	agcaactttt	gaaaacttca	cacttgttac	catttagaag	1320
tttcctggaa	aatatatgga	ccgtaccatc	cagcagtgca	tcagtatgtc	tgaattgggg	1380
aagtaaaatg	ccctgactga	attctcttga	gactagatgg	gacatacata	tatagagaga	1440
gagtgagaga	gtcgtgtttc	gtaagtgcct	gagcttagga	agttttcttc	tggatatata	1500
acattgcaca	agggaagacg	agtgtggagg	ataggttaag	aaaggaaagg	gacagaagtc	1560
ttgcaatagg	ctgcagacat	tttaatacca	tgccagagaa	gagtattctg	ctgaaaccaa	1620
caggttttac	tggtcaaaat	gactgctgaa	aataattttc	aagttgaaag	atctagtttt	1680
atcttagttt	gccttctttg	tacagacatg	ccaagaggtg	acatttagca	gtgcattggt	1740
ataagcaatt	atttcatcag	ttctcagatt	aacaagcatt	tctgctctgc	ctgcaggccc	1800
ccaggcactt	tttttttgg	atggctcaaa	atatggtgct	gctttatata	aaccttacat	1860
ttatatagtg	cacctatgag	cagttgccta	ccatgtgtcc	accagaggct	atttaattca	1920
tgccaacttg	aaaactctcc	agtttgtagg	agtttggttt	aatttattca	gtttcattag	1980
gactatttt	atatatttat	cctcttcatt	ttctcctaat	gatgcaacat	ctattcttgt	2040
caccctttgg	gagaagttac	atttctggag	gtgatgaagc	aaggagggag	cactaggaag	2100
agaaaagcta	caatttttaa	agctctttgt	caagttagtg	attgcatttg	atcccaaaac	2160
aagatgaatg	tatgcaatgg	gatgtacata	agttatttt	gcccatgcct	aaactagtgc	2220
tatgtaatgg	ggttgtggtt	ttgtttttt	cgatttcgtt	taatgacaaa	ataatctctt	2280
aatatgctga	aatcaagcac	gtgagagttt	ttgtttaaaa	gataagagac	acagcatgta	2340
	•	ctgtgtggag				2400
gttatgcaaa	attatacttt	taaatatttg	ttttgaaatt	actgtaccta	gtcttttttg	2460

39467A.txt.txt

cattactttg taaccttttt ctatgcaaga gtctttacat accactaatt aaatgaagtc 2520 2533 ctttttgact att

<210> 337 <211>

<212> PRT

<213> Homo sapiens

<220>

misc_feature Hey-2 <221>

<223>

<400>

Met Lys Arg Pro Cys Glu Glu Thr Thr Ser Glu Ser Asp Met Asp Glu
10 15

Thr Ile Asp Val Gly Ser Glu Asn Asn Tyr Ser Gly Gln Ser Thr Ser 20 25 30

Ser Val Ile Arg Leu Asn Ser Pro Thr Thr Thr Ser Gln Ile Met Ala 35 40 45

Arg Lys Lys Arg Arg Gly Ile Ile Glu Lys Arg Arg Arg Asp Arg Ile 50 55 60

Asn Asn Ser Leu Ser Glu Leu Arg Arg Leu Val Pro Thr Ala Phe Glu 65 70 75 80

Lys Gln Gly Ser Ala Lys Leu Glu Lys Ala Glu Ile Leu Gln Met Thr 85 90 95

Val Asp His Leu Lys Met Leu Gln Ala Thr Gly Gly Lys Gly Tyr Phe 100 105 110

Asp Ala His Ala Leu Ala Met Asp Phe Met Ser Ile Gly Phe Arg Glu 115 120 125

Cys Leu Thr Glu Val Ala Arg Tyr Leu Ser Ser Val Glu Gly Leu Asp 130 140

Ser Ser Asp Pro Leu Arg Val Arg Leu Val Ser His Leu Ser Thr 145 150 155

Ala Thr Gln Arg Glu Ala Ala Ala Met Thr Ser Ser Met Ala His His 165 170 175

. His His Pro Leu His Pro His His Trp Ala Ala Ala Phe His His Leu 180 185 190

Pro Ala Ala Leu Leu Gln Pro Asn Gly Leu His Ala Ser Glu Ser Thr 195 200 205

Pro Cys Arg Leu Ser Thr Thr Ser Glu Val Pro Pro Ala His Gly Ser 210 215 220

Ala Leu Leu Thr Ala Thr Phe Ala His Ala Asp Ser Ala Leu Arg Met 225 230 235 240

Pro Ser Thr Gly Ser Val Ala Pro Cys Val Pro Pro Leu Ser Thr Ser 245 250 255

Leu Leu Ser Leu Ser Ala Thr Val His Ala Ala Ala Ala Ala Thr 260 265 270

Ala Ala Ala His Ser Phe Pro Leu Ser Phe Ala Gly Ala Phe Pro Met 275 280 285

Leu Pro Pro Asn Ala Ala Ala Ala Val Ala Ala Ala Thr Ala Ile Ser 290 295 300

Pro Pro Leu Ser Val Ser Ala Thr Ser Ser Pro Gln Gln Thr Ser Ser 305 310 315 320

Gly Thr Asn Asn Lys Pro Tyr Arg Pro Trp Gly Thr Glu Val Gly Ala 325 330 335

Phe

<210> 40 <211> 1471

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Hes-1

atcacacagg atccggagct ggtgctgata acagcggaat cccccgtcta cctctctct 60 tggtcctgga acagcgctac tgatcaccaa gtagccacaa aatataataa accctcagca 120 180 cttqctcagt agttttgtga aagtctcaag taaaagagac acaaacaaaa aattcttttt 240 cagctgatat aatggagaaa aattcctcgt ccccggtggc tgctacccca gccagtgtca 300 acacgacacc ggataaacca aagacagcat ctgagcacag aaagtcatca aagcctatta 360 420 tqqaqaaaaq acqaaqaqca agaataaatg aaagtctgag ccagctgaaa acactgattt 480 tggatgctct gaagaaagat agctcgcggc attccaagct ggagaaggcg gacattctgg 540 aaatqacaqt qaagcacctc cggaacctgc agcgggcgca gatgacggct gcgctgagca 600 cagacccaag tgtgctgggg aagtaccgag ccggcttcag cgagtgcatg aacgaggtga

39467A.txt.txt 660 cccgcttcct gtccacgtgc gagggcgtta ataccgaggt gcgcactcgg ctgctcggcc 720 acctggccaa ctgcatgacc cagatcaatg ccatgaccta ccccgggcag ccgcaccccg 780 ccttgcaggc gccgccaccg ccccaccgg gacccggcgg cccccagcac gcgccgttcg cgccgccgcc gccactcgtg cccatccccg ggggcgcggc gcccctccc ggcggcgccc 840 900 cctqcaagct gggcagccag qctqqaqagg cggctaaggt gtttggaggc ttccaggtgg 960 taccggctcc cgatggccag tttgctttcc tcattcccaa cggggccttc gcgcacagcg 1020 gccctgtcat ccccgtctac accagcaaca gcggcacctc cgtgggcccc aacgcagtgt 1080 caccttccaq cggcccctcg cttacqqcgg actccatgtg gaggccgtgg cggaactgag 1140 ggggctcagg ccaccctcc tcctaaactc cccaacccac ctctcttccc tceggactct aaacaggaac ttgaatactg ggagagaaga ggactttttt gattaagtgg ttactttgtg 1200 tttttttaat ttctaagaag ttactttttg tagagagagc tgtattaagt gactgaccat 1260 1320 qcactatatt tgtatatatt ttatatgttc atattggatt gcgcctttgt attataaaag 1380 ctcagatgac atttcgtttt ttacacgaga tttctttttt atgtgatgcc aaagatgttt gaaaatgctc ttaaaatatc ttcctttggg gaagtttatt tgagaaaata taataaaaga 1440 1471 aaaaagtaaa ggcaaaaaaa aaaaaaaaaa a

```
<210> 41
<211> 280
<212> PRT
<213> Homo sapiens
```

<220> <221> misc_feature

<223> Hes-1

<400> 41

Met Pro Ala Asp Ile Met Glu Lys Asn Ser Ser Ser Pro Val Ala Ala 1 10 15

Thr Pro Ala Ser Val Asn Thr Thr Pro Asp Lys Pro Lys Thr Ala Ser 20 25 30

Glu His Arg Lys Ser Ser Lys Pro Ile Met Glu Lys Arg Arg Arg Ala 40 45

Arg Ile Asn Glu Ser Leu Ser Gln Leu Lys Thr Leu Ile Leu Asp Ala 50 55 60

Leu Lys Lys Asp Ser Ser Arg His Ser Lys Leu Glu Lys Ala Asp Ile 65 70 75 80

Leu Glu Met Thr Val Lys His Leu Arg Asn Leu Gln Arg Ala Gln Met 85 90 95

Thr Ala Ala Leu Ser Thr Asp Pro Ser Val Leu Gly Lys Tyr Arg Ala

100

110

Gly Phe Ser Glu Cys Met Asn Glu Val Thr Arg Phe Leu Ser Thr Cys 115 120 125

Glu Gly Val Asn Thr Glu Val Arg Thr Arg Leu Leu Gly His Leu Ala 130 135 140

Asn Cys Met Thr Gln Ile Asn Ala Met Thr Tyr Pro Gly Gln Pro His 145 150 155 160 160

Pro Ala Leu Gln Ala Pro Pro Pro Pro Pro Pro Gly Pro Gly Pro 165 170 175 165

Gln His Ala Pro Phe Ala Pro Pro Pro Leu Val Pro Ile Pro Gly

Gly Ala Ala Pro Pro Pro Gly Gly Ala Pro Cys Lys Leu Gly Ser Gln
195 200 205

Ala Gly Glu Ala Ala Lys Val Phe Gly Gly Phe Gln Val Val Pro Ala 210 215 220

Pro Asp Gly Gln Phe Ala Phe Leu Ile Pro Asn Gly Ala Phe Ala His 225 230 235 240

Ser Gly Pro Val Ile Pro Val Tyr Thr Ser Asn Ser Gly Thr Ser Val 245 250 255

Gly Pro Asn Ala Val Ser Pro Ser Ser Gly Pro Ser Leu Thr Ala Asp

Ser Met Trp Arg Pro Trp Arg Asn 275 280

<210>

10386 <211>

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

APC

<220>

<221> <222> misc_feature (9521)..(9521)

n is a, c, g, or t

<400> 42

attgaggact cggaaatgag gtccaagggt agccaaggat ggctgcagct tcatatgatc 60 120 agttgttaaa gcaagttgag gcactgaaga tggagaactc aaatcttcga caagagctag

aagataattc caatcatctt acaaaactgg aaactgaggc atctaatatg aaggaagtac

180

ttaaacaact	acaaggaagt	attgaagatg	aagctatggc	ttcttctgga	cagattgatt	240
tattagagcg	tcttaaagag	cttaacttag	atagcagtaa	tttccctgga	gtaaaactgc	300
ggtcaaaaat	gtccctccgt	tcttatggaa	gccgggaagg	atctgtatca	agccgttctg	360
gagagtgcag	tcctgttcct	atgggttcat	ttccaagaag	agggtttgta	aatggaagca	420
gagaaagtac	tggatattta	gaagaacttg	agaaagagag	gtcattgctt	cttgctgatc	480
ttgacaaaga	agaaaaggaa	aaagactggt	attacgctca	acttcagaat	ctcactaaaa	540
gaatagatag	tcttccttta	actgaaaatt	tttccttaca	aacagatatg	accagaaggc	600
aattggaata	tgaagcaagg	caaatcagag	ttgcgatgga	agaacaacta	ggtacctgcc	660
aggatatgga	aaaacgagca	··cagcgaagaa	tagccagaat	tcagcaaatc	gaaaaggaca	720
tacttcgtat	acgacagctt	ttacagtccc	aagcaacaga	agcagagagg	tcatctcaga	780
acaagcatga	aaccggctca	catgatgctg	agcggcagaa	tgaaggtcaa	ggagtgggag	840
aaatcaacat	ggcaacttct	ggtaatggtc	agggttcaac	tacacgaatg	gaccatgaaa	900
cagccagtgt	tttgagttct	agtagcacac	actctgcacc	tcgaaggctg	acaagtcatc	960
tgggaaccaa	ggtggaaatg	gtgtattcat	tgttgtcaat	gcttggtact	catgataagg	1020
atgatatgtc	gcgaactttg	ctagctatgt	ctagctccca	agacagctgt	atatccatgc	1080
gacagtctgg	atgtcttcct	ctcctcatcc	agcttttaca	tggcaatgac	aaagactctg	1140
tattgttggg	aaattcccgg	ggcagtaaag	aggctcgggc	cagggccagt	gcagcactcc	1200
acaacatcat	tcactcacag	cctgatgaca	agagaggcag	gcgtgaaatc	cgagtccttc	1260
atcttttgga	acagatacgc	gcttactgtg	aaacctgttg	ggagtggcag	gaagctcatg	1320
aaccaggcat	ggaccaggac	aaaaatccaa	tgccagctcc	tgttgaacat	cagatctgtc	1380
ctgctgtgtg	tgttctaatg	aaactttcat	ttgatgaaga	gcatagacat	gcaatgaatg	1440
aactaggggg	actacaggcc	attgcagaat	tattgcaagt	ggactgtgaa	atgtacgggc	1500
ttactaatga	ccactacagt	attacactaa	gacgatatgc	tggaatggct	ttgacaaact	1560
tgacttttgg	agatgtagcc	aacaaggcta	cgctatgctc	tatgaaaggc	tgcatgagag	1620
cacttgtggc	ccaactaaaa	tctgaaagtg	aagacttaca	gcaggttatt	gcaagtgttt	1680
tgaggaattt	gtcttggcga	gcagatgtaa	atagtaaaaa	gacgttgcga	gaagttggaa	1740
gtgtgaaagc	attgatggaa	tgtgctttag	aagttaaaaa	ggaatcaacc	ctcaaaagcg	1800
tattgagtgc	cttatggaat	ttgtcagcac	attgcactga	gaataaagct	gatatatgtg	1860
ctgtagatgg	tgcacttgca	tttttggttg	gcactcttac	ttaccggagc	cagacaaaca	1920
ctttagccat	tattgaaagt	ggaggtggga	tattacggaa	tgtgtccagc	ttgatagcta	1980
caaatgagga	ccacaggcaa	atcctaagag	agaacaactg	tctacaaact	ttattacaac	2040
acttaaaatc	tcatagtttg	acaatagtca	gtaatgcatg	tggaactttg	tggaatctct	2100
cagcaagaaa	tcctaaagac	caggaagcat	tatgggacat	gggggcagtt	agcatgctca	2160
agaacctcat	tcattcaaag	cacaaaatga	ttgctatggg	aagtgctgca	gctttaagga	2220

atctcatggc aaataggcct gcgaagtaca aggatgccaa tattatgtct cctggctcaa	2280
gcttgccatc tcttcatgtt aggaaacaaa aagccctaga agcagaatta gatgctcagc	2340
acttatcaga aacttttgac aatatagaca atttaagtcc caaggcatct catcgtagta	2400
agcagagaca caagcaaagt ctctatggtg attatgtttt tgacaccaat cgacatgatg	2460
ataataggtc agacaatttt aatactggca acatgactgt cctttcacca tatttgaata	2520
ctacagtgtt acccagctcc tcttcatcaa gaggaagctt agatagttct cgttctgaaa	2580
aagatagaag tttggagaga gaacgcggaa ttggtctagg caactaccat ccagcaacag	2640
aaaatccagg aacttcttca aagcgaggtt tgcagatctc caccactgca gcccagattg	2700
ccaaagtcat ggaagaagtg tcagccattc atacctctca ggaagacaga agttctgggt	2760
ctaccactga attacattgt gtgacagatg agagaaatgc acttagaaga agctctgctg	2820
cccatacaca ttcaaacact tacaatttca ctaagtcgga aaattcaaat aggacatgtt	2880
ctatgcctta tgccaaatta gaatacaaga gatcttcaaa tgatagttta aatagtgtca	2940
gtagtagtga tggttatggt aaaagaggtc aaatgaaacc ctcgattgaa tcctattctg	3000
aagatgatga aagtaagttt tgcagttatg gtcaataccc agccgaccta gcccataaaa	3060
tacatagtgc aaatcatatg gatgataatg atggagaact agatacacca ataaattata	3120
gtcttaaata ttcagatgag cagttgaact ctggaaggca aagtccttca cagaatgaaa	3180
gatgggcaag acccaaacac ataatagaag atgaaataaa acaaagtgag caaagacaat	3240
caaggaatca aagtacaact tatcctgttt atactgagag cactgatgat aaacacctca	3300
agttccaacc acattttgga cagcaggaat gtgtttctcc atacaggtca cggggagcca	3360
atggttcaga aacaaatcga gtgggttcta atcatggaat taatcaaaat gtaagccagt	3420
ctttgtgtca agaagatgac tatgaagatg ataagcctac caattatagt gaacgttact	3480
ctgaagaaga acagcatgaa gaagaagaga gaccaacaaa ttatagcata aaatataatg	3540
aagagaaacg tcatgtggat cagcctattg attatagttt aaaatatgcc acagatattc	3600
cttcatcaca gaaacagtca ttttcattct caaagagttc atctggacaa agcagtaaaa	3660
ccgaacatat gtcttcaagc agtgagaata cgtccacacc ttcatctaat gccaagaggc	3720
agaatcagct ccatccaagt tctgcacaga gtagaagtgg tcagcctcaa aaggctgcca	3780
cttgcaaagt ttcttctatt aaccaagaaa caatacagac ttattgtgta gaagatactc	3840
caatatgttt ttcaagatgt agttcattat catctttgtc atcagctgaa gatgaaatag	3900
gatgtaatca gacgacacag gaagcagatt ctgctaatac cctgcaaata gcagaaataa	3960
aagaaaagat tggaactagg tcagctgaag atcctgtgag cgaagttcca gcagtgtcac	4020
agcaccctag aaccaaatcc agcagactgc agggttctag tttatcttca gaatcagcca	4080
ggcacaaagc tgttgaattt tcttcaggag cgaaatctcc ctccaaaagt ggtgctcaga	4140
cacccaaaag tccacctgaa cactatgttc aggagacccc actcatgttt agcagatgta	4200
cttctgtcag ttcacttgat agttttgaga gtcgttcgat tgccagctcc gttcagagtg	4260
\cdot	

	aaccatgcag	g tggaatggta	a agtggcatta	a taagccccag	tgatcttcca	gatagccctg	4320
	gacaaaccat	gccaccaago	agaagtaaaa	cacctccacc	acctcctcaa	acagctcaaa	4380
	ccaagcgaga	a agtacctaaa	a aataaagcad	ctactgctga	aaagagagag	agtggaccta	4440
	agcaagctgo	agtaaatgct	gcagttcaga	gggtccaggt	tcttccagat	gctgatactt	4500
	tattacattt	tgccacggaa	agtactccag	atggattttc	ttgttcatcc	agcctgagtg	4560
	ctctgagcct	cgatgagcca	ı tttatacaga	aagatgtgga	attaagaata	atgcctccag	4620
	ttcaggaaaa	tgacaatggg	, aatgaaacag	aatcagagca	gcctaaagaa	tcaaatgaaa	4680
	accaagagaa	agaggcagaa	aaaactattg	attctgaaaa	ggacctatta	gatgattcag	4740
	atgatgatga	tattgaaata	ctagaagaat	gtattatttc	tgccatgcca	acaaagtcat	4800
	cacgtaaagc	aaaaaagcca	gcccagactg	cttcaaaatt	acctccacct	gtggcaagga	4860
,	aaccaagtca	gctgcctgtg	tacaaacttc	taccatcaca	aaacaggttg	caaccccaaa	4920
i	agcatgttag	ttttacaccg	ggggatgata	tgccacgggt	gtattgtgtt	gaagggacac	4980
	ctataaactt	ttccacagct	acatctctaa	gtgatctaac	aatcgaatcc	cctccaaatg	5040
į	agttagctgc	tggagaagga	gttagaggag	gagcacagtc	aggtgaattt	gaaaaacgag	5100
ā	ataccattcc	tacagaaggc	agaagtacag	atgaggctca	aggaggaaaa	acctcatctg	5160
1	taaccatacc	tgaattggat	gacaataaag	cagaggaagg	tgatattctt	gcagaatgca	5220
1	ttaattctgc	tatgcccaaa	gggaaaagtc	acaagccttt	ccgtgtgaaa	aagataatgg	5280
ā	accaggtcca	gcaagcatct	gcgtcgtctt	ctgcacccaa	caaaaatcag	ttagatggta	5340
ć	agaaaaagaa	accaacttca	ccagtaaaac	ctataccaca	aaatactgaa	tataggacac	5400
9	gtgtaagaaa	aaatgcagac	tcaaaaaata	atttaaatgc	tgagagagtt	ttctcagaca	5460
ā	caaagattc	aaagaaacag	aatttgaaaa	ataattccaa	ggacttcaat	gataagctcc	5520
C	aaataatga	agatagagtc	agaggaagtt	ttgcttttga	ttcacctcat	cattacacgc	5580
C	tattgaagg	aactccttac	tgtttttcac	gaaatgattc	tttgagttct	ctagattttg	5640
а	itgatgatga	tgttgacctt	tccagggaaa	aggctgaatt	aagaaaggca	aaagaaaata	5700
а	ggaatcaga	ggctaaagtt	accagccaca	cagaactaac	ctccaaccaa	caatcagcta	5760
а	taagacaca	agctattgca	aagcagccaa	taaatcgagg	tcagcctaaa	cccatacttc	5820
a	gaaacaatc	cacttttccc	cagtcatcca	aagacatacc	agacagaggg	gcagcaactg	5880
a	tgaaaagtt	acagaatttt	gctattgaaa	atactccagt	ttgcttttct	cataattcct	5940
C	tctgagttc	tctcagtgac	attgaccaag	aaaacaacaa	taaagaaaat	gaacctatca	6000
a	agagactga	gccccctgac	tcacagggag	aaccaagtaa	acctcaagca	tcaggctatg	6060
c	tcctaaatc	atttcatgtt	gaagataccc	cagtttgttt	ctcaagaaac	agttctctca	6120
g	ttctcttag	tattgactct	gaagatgacc	tgttgcagga	atgtataagc	tccgcaatgc	6180
c	aaaaaagaa	aaagccttca	agactcaagg	gtgataatga	aaaacatagt	cccagaaata	6240
t	gggtggcat	attaggtgaa	gatctgacac	ttgatttgaa	agatatacag	agaccagatt	6300

cagaacatgg tctatcccct gattcagaaa attttgattg gaaagctatt caggaaggtg	6360
caaattccat agtaagtagt ttacatcaag ctgctgctgc tgcatgttta tctagacaag	6420
cttcgtctga ttcagattcc atcctttccc tgaaatcagg aatctctctg ggatcaccat	6480
ttcatcttac acctgatcaa gaagaaaaac cctttacaag taataaaggc ccacgaattc	6540
taaaaccagg ggagaaaagt acattggaaa ctaaaaagat agaatctgaa agtaaaggaa	6600
tcaaaggagg aaaaaaagtt tataaaagtt tgattactgg aaaagttcga tctaattcag	6660
aaatttcagg ccaaatgaaa cagccccttc aagcaaacat gccttcaatc tctcgaggca	6720
ggacaatgat tcatattcca ggagttcgaa atagctcctc aagtacaagt cctgtttcta	6780
aaaaaggccc accccttaag actccagcct ccaaaagccc tagtgaaggt caaacagcca	6840
ccacttctcc tagaggagcc aagccatctg tgaaatcaga attaagccct gttgccaggc	6900
agacatccca aataggtggg tcaagtaaag caccttctag atcaggatct agagattcga	6960
ccccttcaag acctgcccag caaccattaa gtagacctat acagtctcct ggccgaaact	7020
caatttcccc tggtagaaat ggaataagtc ctcctaacaa attatctcaa cttccaagga	7080
catcatcccc tagtactgct tcaactaagt cctcaggttc tggaaaaatg tcatatacat	7140
ctccaggtag acagatgagc caacagaacc ttaccaaaca aacaggttta tccaagaatg	7200
ccagtagtat tccaagaagt gagtctgcct ccaaaggact aaatcagatg aataatggta	7260
atggagccaa taaaaaggta gaactttcta gaatgtcttc aactaaatca agtggaagtg	7320
aatctgatag atcagaaaga cctgtattag tacgccagtc aactttcatc aaagaagctc	7380
caagcccaac cttaagaaga aaattggagg aatctgcttc atttgaatct ctttctccat	7440
catctagacc agcttctccc actaggtccc aggcacaaac tccagtttta agtccttccc	7500
ttcctgatat gtctctatcc acacattcgt ctgttcaggc tggtggatgg cgaaaactcc	7560
cacctaatct cagtcccact atagagtata atgatggaag accagcaaag cgccatgata	7620
ttgcacggtc tcattctgaa agtccttcta gacttccaat caataggtca ggaacctgga	7680
aacgtgagca cagcaaacat tcatcatccc ttcctcgagt aagcacttgg agaagaactg	7740
gaagttcatc ttcaattctt tctgcttcat cagaatccag tgaaaaagca aaaagtgagg	7800
atgaaaaaca tgtgaactct atttcaggaa ccaaacaaag taaagaaaac caagtatccg	7860
caaaaggaac atggagaaaa ataaaagaaa atgaattttc tcccacaaat agtacttctc	7920
agaccgtttc ctcaggtgct acaaatggtg ctgaatcaaa gactctaatt tatcaaatgg	7980
cacctgctgt ttctaaaaca gaggatgttt gggtgagaat tgaggactgt cccattaaca	8040
atcctagatc tggaagatct cccacaggta atactccccc ggtgattgac agtgtttcag	8100
aaaaggcaaa tccaaacatt aaagattcaa aagataatca ggcaaaacaa aatgtgggta	8160
atggcagtgt tcccatgcgt accgtgggtt tggaaaatcg cctgaactcc tttattcagg	8220
tggatgcccc tgaccaaaaa ggaactgaga taaaaccagg acaaaataat cctgtccctg	8280
tatcagagac taatgaaagt tctatagtgg aacgtacccc attcagttct agcagctcaa	8340

WO 2005/014854 PCT/EP2004/008819

gcaaacacag ttcacctagt gggactgttg ctgccagagt gactcctttt aattacaaco	8400
caagccctag gaaaagcagc gcagatagca cttcagctcg gccatctcag atcccaactc	8460
cagtgaataa caacacaaag aagcgagatt ccaaaactga cagcacagaa tccagtggaa	8520
cccaaagtcc taagcgccat tctgggtctt accttgtgac atctgtttaa aagagaggaa	8580
gaatgaaact aagaaaattc tatgttaatt acaactgcta tatagacatt ttgtttcaaa	8640
tgaaacttta aaagactgaa aaattttgta aataggtttg attcttgtta gagggttttt	8700
gttctggaag ccatatttga tagtatactt tgtcttcact ggtcttattt tgggaggcac	8760
tcttgatggt taggaaaaa atagtaaagc caagtatgtt tgtacagtat gttttacatg	8820
tatttadagt agcatcccat cccaacttcc tttaattatt gcttgtctta aaataatgaa	8880
cactacagat agaaaatatg atatattgct gttatcaatc atttctagat tataaactga	8940
ctaaacttac atcagggaaa aattggtatt tatgcaaaaa aaaatgtttt tgtccttgtg	9000
agtccatcta acatcataat taatcatgtg gctgtgaaat tcacagtaat atggttcccg	9060
atgaacaagc tttacccagc ctgtttgctt tactgcatga atgaaactga tggttcaatt	9120
tcagaagtaa tgattaacag ttatgtggtc acatgatgtg catagagata gctacagtgt	9180
aataatttac actattttgt gctccaaaca aaacaaaaat ctgtgtaact gtaaaacatt	9240
gaatgaaact attttacctg aactagattt tatctgaaag taggtagaat ttttgctatg	9300
ctgtaatttg ttgtatattc tggtatttga ggtgagatgg ctgctctttt attaatgaga	9360
catgaattgt gtctcaacag aaactaaatg aacatttcag aataaattat tgctgtatgt	9420
aaactgttac tgaaattggt atttgtttga agggtcttgt ttcacatttg tattaataat	9480
tgtttaaaat gcctctttta aaagcttata taaattttt ncttcagctt ctatgcatta	9540
agagtaaaat tcctcttact gtaataaaaa caattgaaga agactgttgc cacttaacca	9600
ttccatgcgt tggcacttat ctattcctga aattctttta tgtgattagc tcatcttgat	9660
ttttaacatt tttccactta aactttttt tcttactcca ctggagctca gtaaaagtaa	9720
attcatgtaa tagcaatgca agcagcctag cacagactaa gcattgagca taataggccc	9780
acataatttc ctctttctta atattataga aattctgtac ttgaaattga ttcttagaca	9840
ttgcagtctc ttcgaggctt tacagtgtaa actgtcttgc cccttcatct tcttgttgca	9900
actgggtctg acatgaacac tttttatcac cctgtatgtt agggcaagat ctcagcagtg	9960
aagtataatc agcactttgc catgctcaga aaattcaaat cacatggaac tttagaggta	10020
gatttaatac gattaagata ttcagaagta tattttagaa tccctgcctg ttaaggaaac	10080
tttatttgtg gtaggtacag ttctggggta catgttaagt gtccccttat acagtggagg	10140
gaagtcttcc ttcctgaagg aaaataaact gacacttatt aactaagata atttacttaa	10200
tatatcttcc ctgatttgtt ttaaaagatc agagggtgac tgatgataca tgcatacata	10260
tttgttgaat aaatgaaaat ttatttttag tgataagatt catacactct gtatttgggg	10320
agagaaaacc tttttaagca tggtggggca ctcagatagg agtgaataca cctacctggt	10380
•	

10386

39467A.txt.txt

ggtcat <210> 2843 <211> <212> PRT Homo sapiens <220> misc_feature <221> <223> APC 43 <400> Lys Met Glu Asn Ser Asn Leu Arg Gln Glu Leu Glu Asp Asn Ser Asn 20 25 30 His Leu Thr Lys Leu Glu Thr Glu Ala Ser Asn Met Lys Glu Val Leu 35 40 45 Lys Gln Leu Gln Gly Ser Ile Glu Asp Glu Ala Met Ala Ser Ser Gly 50 60 Gln Ile Asp Leu Leu Glu Arg Leu Lys Glu Leu Asn Leu Asp Ser Ser 65 70 75 80 Asn Phe Pro Gly Val Lys Leu Arg Ser Lys Met Ser Leu Arg Ser Tyr 90 95 Gly Ser Arg Glu Gly Ser Val Ser Ser Arg Ser Gly Glu Cys Ser Pro 100 105 110 Val Pro Met Gly Ser Phe Pro Arg Arg Gly Phe Val Asn Gly Ser Arg 115 120 125 Glu Ser Thr Gly Tyr Leu Glu Glu Leu Glu Lys Glu Arg Ser Leu Leu 130 135 140 Leu Ala Asp Leu Asp Lys Glu Glu Lys Glu Lys Asp Trp Tyr Tyr Ala 145 150 155 160 Gln Leu Gln Asn Leu Thr Lys Arg Ile Asp Ser Leu Pro Leu Thr Glu 165 170 175 Asn Phe Ser Leu Gln Thr Asp Met Thr Arg Arg Gln Leu Glu Tyr Glu

Ala Arg Gln Ile Arg Val Ala Met Glu Glu Gln Leu Gly Thr Cys Gln 195 200 205 WO 2005/014854 PCT/EP2004/008819

39467A.txt.txt Asp Met Glu Lys Arg Ala Gln Arg Arg Ile Ala Arg Ile Gln Gln Ile 210 215 220

Glu Lys Asp Ile Leu Arg Ile Arg Gln Leu Leu Gln Ser Gln Ala Thr 225 230 235 240

Glu Ala Glu Arg Ser Ser Gln Asn Lys His Glu Thr Gly Ser His Asp 245 250 255

Ala Glu Arg Gln Asn Glu Gly Gln Gly Val Gly Glu Ile Asn Met Ala 260 265 270

Thr Ser Gly Asn Gly Gln Gly Ser Thr Thr Arg Met Asp His Glu Thr

Ala Ser Val Leu Ser Ser Ser Ser Thr His Ser Ala Pro Arg Arg Leu 290 295 300

Thr Ser His Leu Gly Thr Lys Val Glu Met Val Tyr Ser Leu Leu Ser 305 310 315 320

Met Leu Gly Thr His Asp Lys Asp Asp Met Ser Arg Thr Leu Leu Ala 325 330 335

Met Ser Ser Ser Gln Asp Ser Cys Ile Ser Met Arg Gln Ser Gly Cys 340 345 350

Leu Pro Leu Leu Ile Gln Leu Leu His Gly Asn Asp Lys Asp Ser Val 355 360 365

Leu Leu Gly Asn Ser Arg Gly Ser Lys Glu Ala Arg Ala Arg Ala Ser 370 375 380

Ala Ala Leu His Asn Ile Ile His Ser Gln Pro Asp Asp Lys Arg Gly 385 390 395 400

Arg Arg Glu Ile Arg Val Leu His Leu Leu Glu Gln Ile Arg Ala Tyr 405 410 415

Cys Glu Thr Cys Trp Glu Trp Gln Glu Ala His Glu Pro Gly Met Asp 420 425 430

Gln Asp Lys Asn Pro Met Pro Ala Pro Val Glu His Gln Ile Cys Pro 435 440 445

Ala Val Cys Val Leu Met Lys Leu Ser Phe Asp Glu Glu His Arg His 450 460

Ala Met Asn Glu Leu Gly Gly Leu Gln Ala Ile Ala Glu Leu Leu Gln 465 470 475 480 39467A.txt.txt

Val Asp Cys Glu Met Tyr Gly Leu Thr Asn Asp His Tyr Ser Ile Thr

485 490 495

Leu Arg Arg Tyr Ala Gly Met Ala Leu Thr Asn Leu Thr Phe Gly Asp 500 505 510

Val Ala Asn Lys Ala Thr Leu Cys Ser Met Lys Gly Cys Met Arg Ala 515 520 525

Leu Val Ala Gln Leu Lys Ser Glu Ser Glu Asp Leu Gln Gln Val Ile 530 535 540

Ala Ser Val Leu Arg Asn Leu Ser Trp Arg Ala Asp Val Asn Ser Lys 545 - 550 - 555 560

Lys Thr Leu Arg Glu Val Gly Ser Val Lys Ala Leu Met Glu Cys Ala 565 570 575

Leu Glu Val Lys Lys Glu Ser Thr Leu Lys Ser Val Leu Ser Ala Leu 580 585 590

Trp Asn Leu Ser Ala His Cys Thr Glu Asn Lys Ala Asp Ile Cys Ala 595 600 605

Val Asp Gly Ala Leu Ala Phe Leu Val Gly Thr Leu Thr Tyr Arg Ser 610 615 620

Gln Thr Asn Thr Leu Ala Ile Ile Glu Ser Gly Gly Gly Ile Leu Arg 625 630 635 640

Asn Val Ser Ser Leu Ile Ala Thr Asn Glu Asp His Arg Gln Ile Leu 645 650 655

Arg Glu Asn Asn Cys Leu Gln Thr Leu Leu Gln His Leu Lys Ser His 660 665 670

Ser Leu Thr Ile Val Ser Asn Ala Cys Gly Thr Leu Trp Asn Leu Ser 675 680 685

Ala Arg Asn Pro Lys Asp Gln Glu Ala Leu Trp Asp Met Gly Ala Val 690 695 700

Ser Met Leu Lys Asn Leu Ile His Ser Lys His Lys Met Ile Ala Met 705 710 715 720

Gly Ser Ala Ala Ala Leu Arg Asn Leu Met Ala Asn Arg Pro Ala Lys 725 730 735

Tyr Lys Asp Ala Asn Ile Met Ser Pro Gly Ser Ser Leu Pro Ser Leu 740 745 750

39467A.txt.txt
His Val Arg Lys Gln Lys Ala Leu Glu Ala Glu Leu Asp Ala Gln His
755 760 765

Leu Ser Glu Thr Phe Asp Asn Ile Asp Asn Leu Ser Pro Lys Ala Ser 770 775 780

His Arg Ser Lys Gln Arg His Lys Gln Ser Leu Tyr Gly Asp Tyr Val 785 790 795 800

Phe Asp Thr Asn Arg His Asp Asp Asn Arg Ser Asp Asn Phe Asn Thr 805 815

Gly Asn Met Thr Val Leu Ser Pro Tyr Leu Asn Thr Thr Val Leu Pro 820 825 830

Ser Ser Ser Ser Arg Gly Ser Leu Asp Ser Ser Arg Ser Glu Lys 835 840 845

Asp Arg Ser Leu Glu Arg Glu Arg Gly Ile Gly Leu Gly Asn Tyr His 850 855 860

Pro Ala Thr Glu Asn Pro Gly Thr Ser Ser Lys Arg Gly Leu Gln Ile 865 870 875 880

Ser Thr Thr Ala Ala Gln Ile Ala Lys Val Met Glu Glu Val Ser Ala 885 890 895

Ile His Thr Ser Gln Glu Asp Arg Ser Ser Gly Ser Thr Thr Glu Leu 900 905 910

His Cys Val Thr Asp Glu Arg Asn Ala Leu Arg Arg Ser Ser Ala Ala 915 920 925

His Thr His Ser Asn Thr Tyr Asn Phe Thr Lys Ser Glu Asn Ser Asn 930 935 940

Arg Thr Cys Ser Met Pro Tyr Ala Lys Leu Glu Tyr Lys Arg Ser Ser 945 950 955 960

Asn Asp Ser Leu Asn Ser Val Ser Ser Asp Gly Tyr Gly Lys Arg 965 970 975

Gly Gln Met Lys Pro Ser Ile Glu Ser Tyr Ser Glu Asp Asp Glu Ser 980 985 990

Lys Phe Cys Ser Tyr Gly Gln Tyr Pro Ala Asp Leu Ala His Lys Ile 995 1000 1005

His Ser Ala Asn His Met Asp Asp Asp Gly Glu Leu Asp Thr 1010 1015 1020 WO 2005/014854 PCT/EP2004/008819

39467A.txt.txt
Pro Ile Asn Tyr Ser Leu Lys Tyr Ser Asp Glu Gln Leu Asn Ser
1025 1030 1035

- Gly Arg Gln Ser Pro Ser Gln Asn Glu Arg Trp Ala Arg Pro Lys 1040 1050
- His Ile Ile Glu Asp Glu Ile Lys Gln Ser Glu Gln Arg Gln Ser 1055 1060 1065
- Arg Asn Gln Ser Thr Thr Tyr Pro Val Tyr Thr Glu Ser Thr Asp 1070 1075 1080
- Asp Lys His Leu Lys Phe Gln Pro His Phe Gly Gln Glu Cys 1085 1090 1095
- Val Ser Pro Tyr Arg Ser Arg Gly Ala Asn Gly Ser Glu Thr Asn 1100 1105 1110
- Arg Val Gly Ser Asn His Gly Ile Asn Gln Asn Val Ser Gln Ser 1115 1120 1125
- Leu Cys Gln Glu Asp Asp Tyr Glu Asp Asp Lys Pro Thr Asn Tyr 1130 1135 1140
- Ser Glu Arg Tyr Ser Glu Glu Glu Gln His Glu Glu Glu Arg 1145 1150 1155
- Pro Thr Asn Tyr Ser Ile Lys Tyr Asn Glu Glu Lys Arg His Val 1160 1165 1170
- Asp Gln Pro Ile Asp Tyr Ser Leu Lys Tyr Ala Thr Asp Ile Pro 1175 1180 1185
- Ser Ser Gln Lys Gln Ser Phe Ser Phe Ser Lys Ser Ser Gly 1190 1195 1200
- Gln Ser Ser Lys Thr Glu His Met Ser Ser Ser Glu Asn Thr 1205 1210 1215
- Ser Thr Pro Ser Ser Asn Ala Lys Arg Gln Asn Gln Leu His Pro 1220 1225 1230
- Ser Ser Ala Gln Ser Arg Ser Gly Gln Pro Gln Lys Ala Ala Thr 1235 1240 1245
- Cys Lys Val Ser Ser Ile Asn Gln Glu Thr Ile Gln Thr Tyr Cys 1250 1250 1260
- Val Glu Asp Thr Pro Ile Cys Phe Ser Arg Cys Ser Ser Leu Ser 1265 1270 1275

39467A.txt.txt
Ser Leu Ser Ser Ala Glu Asp Glu Ile Gly Cys Asn Gln Thr Thr
1280 1285 1290

- Gln Glu Ala Asp Ser Ala Asn Thr Leu Gln Ile Ala Glu Ile Lys 1295 1300 1305
- Glu Lys Ile Gly Thr Arg Ser Ala Glu Asp Pro Val Ser Glu Val 1310 1315 1320
- Pro Ala Val Ser Gln His Pro Arg Thr Lys Ser Ser Arg Leu Gln 1325 1330 1335
- Gly Ser Ser Leu Ser Ser Glu Ser Ala Arg His Lys Ala Val Glu 1340 1350
- Phe Ser Ser Gly Ala Lys Ser Pro Ser Lys Ser Gly Ala Gln Thr 1355 1360 1365
- Pro Lys Ser Pro Pro Glu His Tyr Val Gln Glu Thr Pro Leu Met 1370 1375 1380
- Phe Ser Arg Cys Thr Ser Val Ser Ser Leu Asp Ser Phe Glu Ser 1385 1390 1395
- Arg Ser Ile Ala Ser Ser Val Gln Ser Glu Pro Cys Ser Gly Met 1400 1405 1410
- Val Ser Gly Ile Ile Ser Pro Ser Asp Leu Pro Asp Ser Pro Gly 1415 1420 1425
- Gln Thr Met Pro Pro Ser Arg Ser Lys Thr Pro Pro Pro Pro 1430 1435 1440
- Gln Thr Ala Gln Thr Lys Arg Glu Val Pro Lys Asn Lys Ala Pro 1445 1450 1455
- Thr Ala Glu Lys Arg Glu Ser Gly Pro Lys Gln Ala Ala Val Asn 1460 1465 1470
- Ala Ala Val Gln Arg Val Gln Val Leu Pro Asp Ala Asp Thr Leu 1475 1480 1485
- Leu His Phe Ala Thr Glu Ser Thr Pro Asp Gly Phe Ser Cys Ser 1490 1495 1500
- Ser Ser Leu Ser Ala Leu Ser Leu Asp Glu Pro Phe Ile Gln Lys 1505 1510 1515
- Asp Val Glu Leu Arg Ile Met Pro Pro Val Gln Glu Asn Asp Asn 1520 1525 1530

39467A.txt.txt
Gly Asn Glu Thr Glu Ser Glu Gln Pro Lys Glu Ser Asn Glu Asn
1535 1540 1545

- Gln Glu Lys Glu Ala Glu Lys Thr Ile Asp Ser Glu Lys Asp Leu 1550 1560
- Leu Asp Asp Ser Asp Asp Asp Ile Glu Ile Leu Glu Glu Cys 1565 1570 1575
- Ile Ile Ser Ala Met Pro Thr Lys Ser Ser Arg Lys Ala Lys Lys 1580 1585 1590
- Pro Ala Gln Thr Ala Ser Lys Leu Pro Pro Pro Val Ala Arg Lys 1595 1600 1605
- Pro Ser Gln Leu Pro Val Tyr Lys Leu Leu Pro Ser Gln Asn Arg 1610 1615 1620
- Leu Gln Pro Gln Lys His Val Ser Phe Thr Pro Gly Asp Asp Met 1625 1630 1635
- Pro Arg Val Tyr Cys Val Glu Gly Thr Pro Ile Asn Phe Ser Thr 1640 1645 1650
- Ala Thr Ser Leu Ser Asp Leu Thr Ile Glu Ser Pro Pro Asn Glu 1655 1660 1665
- Leu Ala Ala Gly Glu Gly Val Arg Gly Gly Ala Gln Ser Gly Glu 1670 1680
- Phe Glu Lys Arg Asp Thr Ile Pro Thr Glu Gly Arg Ser Thr Asp 1685 1690 1695
- Glu Ala Gln Gly Gly Lys Thr Ser Ser Val Thr Ile Pro Glu Leu 1700 1705 1710
- Asp Asp Asn Lys Ala Glu Glu Gly Asp Ile Leu Ala Glu Cys Ile 1715 1720 1725
- Asn Ser Ala Met Pro Lys Gly Lys Ser His Lys Pro Phe Arg Val 1730 1740
- Lys Lys Ile Met Asp Gln Val Gln Gln Ala Ser Ala Ser Ser Ser 1745 1750 1755
- Ala Pro Asn Lys Asn Gln Leu Asp Gly Lys Lys Lys Pro Thr 1760 1765 1770
- Ser Pro Val Lys Pro Ile Pro Gln Asn Thr Glu Tyr Arg Thr Arg 1775 1780 1785

39467A.txt.txt Val Arg Lys Asn Ala Asp Ser Lys Asn Asn Leu Asn Ala Glu Arg 1790 1795 1800 Val Phe Ser Asp Asn Lys Asp Ser Lys Lys Gln Asn Leu Lys Asn 1805 1810 1815 Asn Ser Lys Asp Phe Asn Asp Lys Leu Pro Asn Asn Glu Asp Arg 1820 1830 1830 Val Arg Gly Ser Phe Ala Phe Asp Ser Pro His His Tyr Thr Pro 1835 1840 1845 Ile Glu Gly Thr Pro Tyr Cys Phe Ser Arg Asn Asp Ser Leu Ser 1850 - 1855 - 1860 Ser Leu Asp Phe Asp Asp Asp Val Asp Leu Ser Arg Glu Lys 1865 1870 1875 Ala Glu Leu Arg Lys Ala Lys Glu Asn Lys Glu Ser Glu Ala Lys 1880 1885 1890 Val Thr Ser His Thr Glu Leu Thr Ser Asn Gln Gln Ser Ala Asn 1895 1900 Lys Thr Gln Ala Ile Ala Lys Gln Pro Ile Asn Arg Gly Gln Pro 1910 1915 1920 Lys Pro Ile Leu Gln Lys Gln Ser Thr Phe Pro Gln Ser Ser Lys Pro Asp Arg Gly Ala Ala Thr Asp Glu Lys Leu Gln Asn 1945 1950 Phe Ala Ile Glu Asn Thr Pro Val Cys Phe Ser His Asn Ser Ser Leu Ser Ser Leu Ser Asp Ile Asp Gln Glu Asn Asn Asn Lys Glu 1970 1975 1980 Asn Glu Pro Ile Lys Glu Thr Glu Pro Pro Asp Ser Gln Gly Glu Lys Pro Gln Ala Ser Gly Tyr Ala Pro Lys Ser Phe His Val Glu Asp Thr Pro Val Cys Phe Ser Arg Asn Ser Ser Leu Ser 2015

Ser Leu Ser Ile Asp Ser Glu Asp Asp Leu Leu Gln Glu Cys Ile

2035

2030

39467A.txt.txt Ser Ala Met Pro Lys Lys Lys Pro Ser Arg Leu Lys Gly 2045 2050 2055 Asp Asn Glu Lys His Ser Pro Arg Asn Met Gly Gly 2060 2065 2070 Ile Leu Gly Glu Asp Leu Thr Leu Asp Leu Lys Asp Ile Gln Arg Pro Asp Ser 2075 2080 2085 Glu His Gly Leu Ser Pro Asp Ser Glu Asn Phe Asp Trp Lys Ala 2090 2095 2100 Ile Gln Glu Gly Ala Asn Ser Ile Val Ser Ser Leu His Gln Ala 2105 2110 2115 Ala Ala Ala Cys Leu Ser Arg Gln Ala Ser Ser Asp Ser Asp 2120 2125 2130 Ser Ile Leu Ser Leu Lys Ser Gly Ile Ser Leu Gly Ser Pro Phe 2135 2140 2145 His Leu Thr Pro Asp Gln Glu Glu Lys Pro Phe Thr Ser Asn Lys 2150 2160 Gly Pro Arg Ile Leu Lys Pro Gly Glu Lys Ser Thr Leu Glu Thr 2165 2170 2175 Lys Lys Ile Glu Ser Glu Ser Lys Gly Ile Lys Gly Gly Lys Lys 2180 2185 2190 Val Tyr Lys Ser Leu Ile Thr Gly Lys Val Arg Ser Asn Ser Glu 2195 2200 2205 Ile Ser Gly Gln Met Lys Gln Pro Leu Gln Ala Asn Met Pro Ser 2210 2215 2220 Ile Ser Arg Gly Arg Thr Met Ile His Ile Pro Gly Val Arg Asn 2225 2230 2235 Ser Ser Thr Ser Pro Val Ser Lys Lys Gly Pro Pro Leu 2245 2250 Ser Ser Pro Ala Ser Lys Ser Pro Ser Glu Gly Gln Thr Ala Thr 2260 2265 Thr Ser Pro Arg Gly Ala Lys Pro Ser Val Lys Ser Glu Leu Ser 2270 2275 2280 Pro Val Ala Arg Gln Thr Ser Gln Ile Gly Gly Ser 2285 2290 2295

Ser Lys Ala

- Pro Ser Arg Ser Gly Ser Arg Asp Ser Thr Pro Ser Arg Pro Ala 2300 2310
- Gln Gln Pro Leu Ser Arg Pro Ile Gln Ser Pro Gly Arg Asn Ser 2315 2320 2325
- Ile Ser Pro Gly Arg Asn Gly Ile Ser Pro Pro Asn Lys Leu Ser 2330 2340
- Gln Leu Pro Arg Thr Ser Ser Pro Ser Thr Ala Ser Thr Lys Ser 2345 2350 2355
- Ser Gly Ser Gly Lys Met Ser Tyr Thr Ser Pro Gly Arg Gln Met 2360 2370
- Ser Gln Gln Asn Leu Thr Lys Gln Thr Gly Leu Ser Lys Asn Ala 2375 2380 2385
- Ser Ser Ile Pro Arg Ser Glu Ser Ala Ser Lys Gly Leu Asn Gln 2390 2395 2400
- Met Asn Asn Gly Asn Gly Ala Asn Lys Lys Val Glu Leu Ser Arg 2405 2410 2415
- Met Ser Ser Thr Lys Ser Ser Gly Ser Glu Ser Asp Arg Ser Glu 2420 2425 2430
- Arg Pro Val Leu Val Arg Gln Ser Thr Phe Ile Lys Glu Ala Pro 2435 2440 2445
- Ser Pro Thr Leu Arg Arg Lys Leu Glu Glu Ser Ala Ser Phe Glu 2450 2450 2460
- Ser Leu Ser Pro Ser Ser Arg Pro Ala Ser Pro Thr Arg Ser Gln 2465 2470 2475
- Ala Gln Thr Pro Val Leu Ser Pro Ser Leu Pro Asp Met Ser Leu 2480 2485 2490
- Ser Thr His Ser Ser Val Gln Ala Gly Gly Trp Arg Lys Leu Pro 2495 2500 2505
- Pro Asn Leu Ser Pro Thr Ile Glu Tyr Asn Asp Gly Arg Pro Ala 2510 2515 2520
- Lys Arg His Asp Ile Ala Arg Ser His Ser Glu Ser Pro Ser Arg 2525 2530 2535
- Leu Pro Ile Asn Arg Ser Gly Thr Trp Lys Arg Glu His Ser Lys 2540 2545 2550

39467A.txt.txt
His Ser Ser Ser Leu Pro Arg Val Ser Thr Trp Arg Arg Thr Gly
2555 2560 2565

Ser Ser Ser Ser Ile Leu Ser Ala Ser Ser Glu Ser Ser Glu Lys 2570 2580

Ala Lys Ser Glu Asp Glu Lys His Val Asn Ser Ile Ser Gly Thr 2585 2590 2595

Lys Gln Ser Lys Glu Asn Gln Val Ser Ala Lys Gly Thr Trp Arg 2600 2605 2610

Lys Ile Lys Glu Asn Glu Phe Ser Pro Thr Asn Ser Thr Ser Gln 2615 2625

Thr Val Ser Ser Gly Ala Thr Asn Gly Ala Glu Ser Lys Thr Leu 2630 2640

Ile Tyr Gln Met Ala Pro Ala Val Ser Lys Thr Glu Asp Val Trp 2645 2650 2655

Val Arg Ile Glu Asp Cys Pro Ile Asn Asn Pro Arg Ser Gly Arg 2660 2665 2670

Ser Pro Thr Gly Asn Thr Pro Pro Val Ile Asp Ser Val Ser Glu 2675 2680 2685

Lys Ala Asn Pro Asn Ile Lys Asp Ser Lys Asp Asn Gln Ala Lys 2690 2695 2700

Gln Asn Val Gly Asn Gly Ser Val Pro Met Arg Thr Val Gly Leu 2705 2710 2715

Glu Asn Arg Leu Asn Ser Phe Ile Gln Val Asp Ala Pro Asp Gln 2720 2725 2730

Lys Gly Thr Glu Ile Lys Pro Gly Gln Asn Asn Pro Val Pro Val 2735 2740 2745

Ser Glu Thr Asn Glu Ser Ser Ile Val Glu Arg Thr Pro Phe Ser 2750 2755 2760

Ser Ser Ser Ser Ser Lys His Ser Ser Pro Ser Gly Thr Val Ala 2765 2770 2775

Ala Arg Val Thr Pro Phe Asn Tyr Asn Pro Ser Pro Arg Lys Ser 2780 2785 2790

Ser Ala Asp Ser Thr Ser Ala Arg Pro Ser Gln Ile Pro Thr Pro 2795 2800 2805

WO 2005/014854 39467A.txt.txt Asn Asn Thr Lys Lys 2815 Val Asn Arg Asp Ser Lys Thr Asp Ser Thr Glu Ser Ser Gly Thr Gln Ser Pro Lys Arg His Ser Gly Ser Tyr 2825 Leu Val Thr Ser Val 2840 <210> 44 <211> 2121 DNA <213> Homo sapiens <220> <221> misc_feature <223> C-myc

<400> ctgctcgcgg ccgccaccgc cgggccccgg ccgtccctgg ctccctcct gcctcgagaa 60 gggcagggct tctcagaggc ttggcgggaa aaaagaacgg agggagggat cgcgctgagt 120 ataaaagccg gttttcgggg ctttatctaa ctcgctgtag taattccagc gagaggcaga 180 gggagCgagc gggCggCCgg ctagggtgga agagcCgggc gagcagagct gcgctgcggg 240 cgtcctggga agggagatcc ggagcgaata gggggcttcg cctctggccc agccctcccg 300 cttgatcccc caggccagcg gtccgcaacc cttgccgcat ccacgaaact ttgcccatag 360 420 cagcgggcgg gcactttgca ctggaactta caacacccga gcaaggacgc gactctcccg 480 acgcggggag gctattctgc ccatttgggg acacttcccc gccgctgcca ggacccgctt ctctgaaagg ctctccttgc agctgcttag acgctggatt tttttcgggt agtggaaaac 540 600 cagcagcctc ccgcgacgat gcccctcaac gttagcttca ccaacaggaa ctatgacctc 660 gactacgact cggtgcagcc gtatttctac tgcgacgagg aggagaactt ctaccagcag 720 cagcagcaga gcgagctgca gcccccggcg cccagcgagg atatctggaa gaaattcgag 780 ctgctgccca ccccgcccct gtcccctagc cgccgctccg ggctctgctc gccctcctac 840 gttgcggtca caccettete cettegggga gacaacgaeg geggtggegg gagettetee 900 acggccgacc agctggagat ggtgaccgag ctgctgggag gagacatggt gaaccagagt 960 ttcatctgcg acccggacga cgagaccttc atcaaaaaca tcatcatcca ggactgtatg 1020 tggagcggct tctcggccgc cgccaagctc gtctcagaga agctggcctc ctaccaggct gcgcgcaaag acagcggcag cccgaacccc gcccgcggcc acagcgtctg ctccacctcc 1080 1140 agcttgtacc tgcaggatct gagcgccgcc gcctcagagt gcatcgaccc ctcggtggtc 1200 ttcccctacc ctctcaacga cagcagctcg cccaagtcct gcgcctcgca agactccagc gccttctctc cgtcctcgga ttctctgctc tcctcgacgg agtcctcccc gcagggcagc 1260 cccgagcccc tggtqctcca tgaggagaca ccgcccacca ccagcagcga ctctgaggag 1320 gaacaagaag atgaggaaga aatcgatgtt gtttctqtqq aaaagaggca ggctcctggc 1380

gtctggatc	accttctgct	ggaggccaca	gcaaacctcc	tcacagccca	1440
gaggtgcca	cgtctccaca	catcagcaca	actacgcagc	gcctccctcc	1500
ctatcctgc	tgccaagagg	gtcaagttgg	acagtgtcag	agtcctgaga	1560
caaccgaaa	atgcaccagc	cccaggtcct	cggacaccga	ggagaatgtc	1620
acacaacgt	cttggagcgc	cagaggagga	acgagctaaa	acggagcttt	1680
gaccagat	cccggagttg	gaaaacaatg	aaaaggcccc	caaggtagtt	1740
gccacagc	atacatcctg	tccgtccaag	cagaggagca	aaagctcatt	1800
ttgttgcg (gaaacgacga	gaacagttga	aacacaaact	tgaacagcta	1860
gcgtaagg a	aaaagtaagg	aaaacgattc	cttctaacag	aaatgtcctg	1920
tgaacttg 1	tttcaaatgc	atgatcaaat	gcaacctcac	aaccttggct	1980
tgaaagat t	ttagccataa	tgtaaactgc	ctcaaattgg	actttgggca	2040
tttatgct t	accatcttt	tttttttctt	taacagattt	gtatttaaga	2100
aaatttta a	,			·	2121
	gaggtgcca ctatcctgc caaccgaaa acacaacgt cgaccagat gccacagc cttgttgcg gcgtaagg tgaacttg tgaaagat tttatgct t	gaggtgcca cgtctccaca ctatcctgc tgccaagagg caaccgaaa atgcaccagc cacacacgt cttggagcgc gaccagat cccggagttg gccacagc atacatcctg cttgttgcg gaaacgacga gcgtaagg aaaagtaagg tgaacttg tttcaaatgc ttgaaagat ttagccataa	gaggtgcca cgtctccaca catcagcaca ctatcctgc tgccaagagg gtcaagttgg caaccgaa atgcaccagc cccaggtcct acacaacgt cttggagcgc cagaggagga gaccagat cccggagttg gaaaacaatg gccacagc atacatcctg tccgtccaag cttgttgcg gaaacgacga gaacagttga gcgtaagg aaaagtaagg aaaagtagg agacctg tttcaaatg ttgaaactt ttgaaagat ttagccataa tgtaaactgc tttatgct taccatctt ttttttctt	gaggtgcca cgtctccaca catcagcaca actacgcagcctatcctgc tgccaagagg gtcaagttgg acagtgtcag caaccgaa atgcaccagc cccaggtcct cggacaccga acacaacgt cttggagcgc cagaggagga acgagctaaa gaccagat cccggagttg gaaaacaatg aaaaggccccagccacagc atacatcctg tccgtccaag cagaggagca acgacagtga gaacagttga aacacaaact gcgtaagg aaaagtaagg aaaacgattc cttctaacag tgaacttg tttcaaatgc atgatcaaat gcaacctcac tgaaagat ttagccataa tgtaaactgc ctcaaattgg tttatgct taccatctt ttttttctt taacagattt	gaggtgcca cgtctccaca catcagcaca actacgcagc gcctccctcc ctatcctgc tgccaagagg gtcaagttgg acagtgtcag agtcctgaga aacccgaaa atgcaccagc cccaggtcct cggacaccga ggagaatgtc acacaacgt cttggagcgc cagaggagga acgagctaaa acggagcttt agaccagat cccggagttg gaaaacaatg aaaaggcccc caaggtagtt agccacagc atacatcctg tccgtccaag cagaggagca aaagctcatt atgttgcg gaaacgacga gaacagttga aacacaaact tgaacagcta gcgtaagg aaaagtaagg aaaacgattc cttctaacag aaatgtcctg tgaacttg ttcaaatg atgatcaaat gcaacctcac aaccttggct tgaaagat ttagccataa tgtaaactgc ctcaaattgg actttggaaagat ttagccataa tgtaaactgc ctcaaattgg actttggaca tttatgct taccatctt ttttttctt taacagattt gtattaaga aaatttta a

<210> 45 439

PRT

<213> Homo sapiens

<220> <221> <223> misc_feature

C-myc

<400>

Met Pro Leu Asn Val Ser Phe Thr Asn Arg Asn Tyr Asp Leu Asp Tyr 1 10 15

Asp Ser Val Gln Pro Tyr Phe Tyr Cys Asp Glu Glu Glu Asn Phe Tyr 20 25 30

Gln Gln Gln Gln Ser Glu Leu Gln Pro Pro Ala Pro Ser Glu Asp 35 40 45

Ile Trp Lys Lys Phe Glu Leu Leu Pro Thr Pro Pro Leu Ser Pro Ser 50 60

Arg Arg Ser Gly Leu Cys Ser Pro Ser Tyr Val Ala Val Thr Pro Phe 65 70 75 80

Ser Leu Arg Gly Asp Asn Asp Gly Gly Gly Ser Phe Ser Thr Ala 85 90 95

Asp Gln Leu Glu Met Val Thr Glu Leu Leu Gly Gly Asp Met Val Asn 100 105 110

Gln Ser Phe Ile Cys Asp Pro Asp Asp Glu Thr Phe Ile Lys Asn Ile 115 120 125

Ile Ile Gln Asp Cys Met Trp Ser Gly Phe Ser Ala Ala Ala Lys Leu 130 140

Val Ser Glu Lys Leu Ala Ser Tyr Gln Ala Ala Arg Lys Asp Ser Gly 150 155 160

Ser Pro Asn Pro Ala Arg Gly His Ser Val Cys Ser Thr Ser Ser Leu 165 170 175

Tyr Leu Gln Asp Leu Ser Ala Ala Ser Glu Cys Ile Asp Pro Ser 180 185 190

Val Val Phe Pro Tyr Pro Leu Asn Asp Ser Ser Ser Pro Lys Ser Cys 195 200 205

Ala Ser Gln Asp Ser Ser Ala Phe Ser Pro Ser Ser Asp Ser Leu Leu 210 225 220

Ser Ser Thr Glu Ser Ser Pro Gln Gly Ser Pro Glu Pro Leu Val Leu 225 230 235 240

His Glu Glu Thr Pro Pro Thr Thr Ser Ser Asp Ser Glu Glu Glu Gln 245 250 255

Glu Asp Glu Glu Ile Asp Val Val Ser Val Glu Lys Arg Gln Ala 260 265 270

Pro Gly Lys Arg Ser Glu Ser Gly Ser Pro Ser Ala Gly Gly His Ser 275 280 285

Lys Pro Pro His Ser Pro Leu Val Leu Lys Arg Cys His Val Ser Thr 290 295 300

His Gln His Asn Tyr Ala Ala Pro Pro Ser Thr Arg Lys Asp Tyr Pro 305 310 315 320

Ala Ala Lys Arg Val Lys Leu Asp Ser Val Arg Val Leu Arg Gln Ile 325 330 335

Ser Asn Asn Arg Lys Cys Thr Ser Pro Arg Ser Ser Asp Thr Glu Glu 340 350

Asn Val Lys Arg Arg Thr His Asn Val Leu Glu Arg Gln Arg Arg Asn 355 360 365

Glu Leu Lys Arg Ser Phe Phe Ala Leu Arg Asp Gln Ile Pro Glu Leu 370 375 380

```
39467<u>A.txt.txt</u>
   Glu Asn Asn Glu Lys Ala Pro Lys Val Val Ile Leu Lys Lys Ala Thr
                        390
  Ala Tyr Ile Leu Ser Val Gln Ala Glu Glu Gln Lys Leu Ile Ser Glu
  Glu Asp Leu Leu Arg Lys Arg Arg Glu Gln Leu Lys His Lys Leu Glu
  Gln Leu Arg Asn Ser Cys Ala
435
  <210>
         46
  <211>
         11
  <212>
         PRT
  <213>
         HIV
  <220>
  <221>
         misc_feature
  <223>
         TAT protein
 <400>
 Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg 10
 <210>
<211>
        47
        54
 <212>
        DNA
 <213>
        Artificial sequence
 <220>
 <223>
        Synthetic primer
 <220>
 <221>
        misc_feature
 <223>
        Prox-1 sense
 <400>
tggtcatctg caagctggat ttcaagagaa tccagcttgc agatgacctt tttc
                                                                            54
<210>
        58
<211>
<212>
        DNA
<213>
       Artificial sequence
<220>
<223>
       Synthetic primer
<220>
<221>
       misc_feature
<223>
       Prox-1 anti-sense
<400>
tcgagaaaaa aggtcatctg caagctggat tctcttgaaa tccagcttgc agtgacca
                                                                           58
<210>
       49
<211>
       55
<212>
       DNA
<213>
       Artificial sequence
```

<220> <223>	Synthetic primer
<220> <221> <223>	
<400> tgagco	49 cagtt tgatatggat ttcaagagaa tccatatcaa actggctctt ttttc 55
<210> <211> <212> <213>	DNA
<220> <223>	Synthetic primer
<220> <221> <223>	misc_feature Prox-2 anti-sense
<400> tcgaga	50 aaaa agagccagtt tgatatggat tctcttgaaa tccatatcaa actgctca 58